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ABSTRACT

Introduced by background information on all exceptionalities, the educational guide presents a general curriculum for use with the educable mentally retarded on a beginning and intermediate level. Areas of concern are language arts, arithmetic skills, social skills, and vocational information. The guide presents suggestions for games, specific learning activities for specific desired skills, arts and crafts, and music appreciation. Materials needed and instructional techniques are also discussed. (JM)

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SPECIAL EDUCATION GUIDE
FOR
ROBERTSON COUNTY SCHOOLS

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Mt. Olivet, Kentucky
1968

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ROBERTSON COUNTY SCHOOLS

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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February, 1968

PREFACE

This guide is the product of a workshop on special education held at Deming School February 6, 8, 10, 13, 15, 1968 under the leadership of Dr. Bradley Clough of the University of Morehead. It is based upon selected activities which will be helpful in children attaining maximum growth.

Since curriculum building must always be considered as an on-going process, this guide is intended merely to point the way. Teachers should find many opportunities for the expansion of and addition to ideas mentioned in the following pages.

We wish to express our sincere appreciation to the many people who have contributed to the developing this guide.

T. Ross Moore,
Supervisor of Instruction

PHILOSOPHY

In practicing the democratic ideal, we recognize that all children have an inherent right to an education. We believe that every child should have every opportunity to grow physically, emotionally, socially, mentally, and morally to the maximum of his ability.

Special education seeks to give those children who cannot profit by attendance in a regular classroom, because of their special problems, their just rights.

We believe that every child should have a well-trained teacher; one who knows how a child grows and developes, accepts him as he is, is understanding, and has sympathy for him; one who recognizes that "What a person believes about himself establishes what he can and will do."[1] The teacher can then help the child to develop his maximum capabilities, to minimize his limitations, to help him grow in confidence so that he may become socially competent and occupationally adequate.

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[1] Combs, Arthur, Educational Leadership: October, 1958, page 23 -
1201 Sixteenth Street, N.W., Washington, D.C.   20036

OBJECTIVES

The general objectives of the education of exceptional children do not differ from the general objectives of education for all children in Robertson County Schools.

These children like all others should be educated to live as useful a life as possible for their particular abilities. They, like others, must become well-adjusted members of the family and the community, must participate in the activities of the world of work, and must assume responsibilities in keeping with their capacities as American citizens. Education, too, must lay the foundations for satisfying spiritual experiences.

We recognize that only through the working together of teachers, parents, service clubs, and agencies, aided by medical guidance can we meet the needs of the exceptional child.

We must identify the child early in his life, refer him to all proper agencies for diagnosis and treatment and then place him in a class best suited to his needs.

This team approach gives each teacher a better understanding of the child as an individual; which is our first step in helping the child to estabhish his place in society.

PROCEDURES

A. POLICIES

1. KENTUCKY STATE BOARD OF EDUCATION REGULATIONS

EDUCATION FOR EXCEPTIONAL CHILDREN

54.010 DEFINITION OF SPECIAL EDUCATIONAL FACILITIES

(1) Special educational facilities means special schools, special classes, and special instruction. All special education facilities shall be under the supervision of the Superintendent of Public Instruction (KRS 157.200(6).

54.020 EXCEPTIONAL CHILDREN

(1) Exceptional children are those who differ or deviate from what is supposed to be the average in physical, mental, emotional or social characteristics and abilities to the extent that they require specialized education in order to attain the maximum of their abilities and capacities. Exceptional children who require special education programs are defined as follows:

(2) Physically Handicapped. (a) Crippled and Special Health Problems. Children who are so handicapped through congenital or acquired defects (including cerebral palsy) in the use of their bodies as to be unable to function with normal children of the same age, or may have certain illnesses such as epilepsy, rheumatic fever, asthma, nephritis, and hemophelia which prevent their attendance in a regular class.

(b) Homebound. Children who are confined to their homes due to some condition which renders them physically unable to attend school but who have sufficient intelligence to profit from instruction. These children are generally those with crippling conditions and special health problems.

(c) Hospitalized. Children who are confined to the hospital for care and treatment and, according to medical prescription, are well enough to participate in a limited special education program.

(2) Mentally Handicapped. (a) Educable. Children who because of retarded intellectual development, as determined by recognized standardized tests, are incapable of being educated through ordinary classroom instruction but whose intellectual ability would indicate a degree of scholastic attainment with the benefit of special education methods and materials. Also used to refer to those mentally retarded children who may be expected to maintain themselves independently in the community as adults. These mentally retarded children would obtain IQ scores between 50 and 75 on recognized standardized individual tests of intelligence.

(b) Trainable. Children who because of retarded intellectual development, as determined by recognized standardized tests, are incapable of being educated through ordinary classroom instruction or special education programs for educable mentally handicapped children but who may be expected to benefit from training in a group setting designed to further their social adjustment and economic usefulness in their homes or in a sheltered environment. Also used to refer to that group of mentally retarded obtaining IQ scores from 35 to 50 on recognized standardized individual tests of intelligence.

(3) Visually Handicapped. (a) Blind. Children who are blind are those whose visual problem is so severe that the child must pursue his education chiefly through the use of Braille, audio aids and special equipment, or if his vision is such that it is not safe for him to be educated in the regular class or in a class for the partially seeing.

(b) Partially Seeing. Children who are parially seeing are those who have visual limitation but are able to use vision as the chief channel of learning. The generally accepted classification for the partially seeing is a Snellen reading of 20/70 or less in the better eye after correction, or those with visual deviations such as progressive myopia who, in the opinion of the eye specialist, can benefit from special education facilities provided for the partially seeing.

(4) Hearing Handicapped. (a) Deaf. Children whose hearing loss is so severe that they are unable to comprehend and learn speech and language even though hearing aids may be useful to some of them. These children generally have a hearing loss of 70 decibels or more in both ears.

(b) Hard of Hearing. Children are considered hard of hearing who are able to understand and learn speech and language but whose hearing is not sufficient for them to learn adequately in a regular school class. These children generally have a hearing loss of from 40-70 decibels in the better ear. Those children witha hearing loss of less than 40 decibels will probably be able to function adequately in a regular class with the assistance of a speech correctionist.

(5) Speech Handicapped. Speech handicapped means children whose speech has been diagnosed by a speech correctionist as deviating or differing from average or normal speech to the extent of hindering adequate communication and requiring specialized instruction for improvement or correction of the handicap.

(6) Neurologically Impaired. Children who are neuroligically impaired are those with a special learning disorder in one area or a limited number of areas of performance or learning. Psychologically, the child's perceptual organization of his environment is impaired. Educationally, the child shows pronounced learning functions in some areas but not in others. This child may be unable to read, to do arithmetic, to formulate language and speech, to do gross or fine manipulative tasks or any one or various combinations of this nature or others. Behaviorally, the child may show gross extremes from acute hyperactivity to complete withdrawal causing much difficulty for himself and concern in the classroon. He may not be able to ignore background auditory or visual stimuli.

54.030 INSTRUCTIONAL PROGRAMS FOR EXCEPTIONAL CHILDREN

Instructional programs for exceptional children means classroom units designed to meet the educational needs of those children who differ or deviate from the average or normal children in physical, mental, emotional or social characteristics and who cannot function in regular classrooms in public schools. Provision is made for instructional programs in addition to, or differant from, those provided in the regular program. The experiences and activities provided are parallel to those for normal children as nearly as the conditions will permit.

54.040 CLASSROOM UNITS FOR EXCEPTIONAL CHILDREN

Classroom units for exceptional children means special instruction in a special class, home or hospital, provided (a) the teacher has the required special education preparation for the type of exceptionality of the children enrolled in the unit, (b) the requisite number of exceptional children are in membership, (c) the physical facilities, equipment, materials, and curriculum are approved. Each classroom unit shall serve only one classification of exceptional children as described in the Criteria. Children with multiple handicaps should be classified for educational purposes by the major educational handicap.

54.050 FRACTIONAL CLASSROOM UNIT FOR EXCEPTIONAL CHILDREN

Fractional classroom unit is a unit having fewer children than prescribed in the required pupil-teacher ratio, or the program is in operation less than a full day or a full school year. Such units may be allotted and certified on a basis proportionate to the minimum pupil-teacher ration and/or the proportionate length of the school day or the school year.

54.060 TEACHING LOAD IN CLASSROOM UNITS FOR EXCEPTIONAL CHILDREN

CLASSIFICATION	NO. CHILDREN PER UNIT (MEMBERSHIP)
PHYSICALLY HANDICAPPED	
Crippled and Special Health (Classes)	8 - 20
Home Instruction	
(County Distructs)	8 - 12
(Independent Districts)	8 - 12
Hospital Instruction	8 - 20
MENTALLY HANDICAPPED	
Educable (Classes)	15 - 20
Trainable (Classes)	6 - 12
VISUALLY HANDICAPPED	
Partially Seeing (Classes)	10 - 20
Blind (Classes)	8 - 12
HEARING HANDICAPPED	
Hard of Hearing	10 - 20
Deaf	8 - 12
SPEECH HANDICAPPED	75 - 100 per week
NEUROLOGICALLY IMPAIRED	6 - 8

54.070 LENGTH OF SCHOOL DAY AND SCHOOL YEAR

(1) School day shall be the same as for non-handicapped children except when the child's handicap indicates a legitimate need for an adjusted day. Such changes shall appear on the Application for Tentative Approval for Classroom Units for Teachers of Exceptional Children.

(2) The school day for trainable mentally handicapped and neurologically impaired children may be less than six (6) clock hours provided the superintendent of the district requests such reduction. The school day for classes for trainable mentally handicapped and neurologically impaired children shall not be less than four and one-half clock hours. The superintendent's request for reduction shall be made on an annual basis prior to the beginning of the school year.

(3) The teacher should spend the remaining one and one-half hours of the school day in preparation. If the teacher is assigned other teaching duties for the remaining one and one-half hours of the school day, the unit allotted to the school district will be reduced proportionately.

(4) School year shall be the same as for non-handicapped children.

54.080 AN APPROVED TEACHER

(1) An approved teacher for classroom units for exceptional children shall have the required special preparation in the specific area of esceptionality. This may be included in, or in addition to, a Bachelor's degree. For example, teachers of the mentally retarded will hold a Special Education Certificate for Teachers of the Mentally Retarded. (See Certification Bulletin.)

(2) It is expected that the teacher will devote a regular teaching day to instructional activities for exceptional children. In addition, the teacher may be assigned to a fair share of routine responsibilities of operating the school. However, in the assignment of routine duties, the class for exceptional children must not be left without supervision.

54.090 HOUSING FACILITIES

(1) Housing facilities shall meet the same standards for regular classrooms as specified in State Board of Education Regulations, Chapter 22. In additinn, housing plans should include needed facilities such as proper toilet arrangement, lunchroom service, special equipment and special materials according to the classification of exceptional children being served. Housing and equipment provisions shall be stated on the application for tentative approval of classroom units for exceptional children before approval can be given.

(2) Classroom units allotted for special classes shall be located in regular elementary or secondary schools, dependent upon the age range of the pupils. The location of a classroom unit in other facilities must be approved by the Division of Special Education, State Department of Education.

54.100 ESTABLISHING A CLASSROOM UNIT FOR EXCEPTIONAL CHILDREN

(1) Local Responsibility. The school superintendent, representing the local board of education, has the primary responsibility for initiating, establishing

and administering the instructional program for exceptional children in the community. He, with others of his professional staff, community representatives, and the leadership and consultation services of the Division of Special Education, State Department of Education, must determine the advisability and the means of providing this important part of the total instructional program. This planning should begin at least a year in advance of the time that the program is to be initiated. The success or failure of the program will depend in a large measure on the soundness and thoroughness of the planning and ultimate administrative policies established for the operation of the program.

(2) It must be remembered that classroom units for teachers of exceptional children are allocated under KRS 157.360 (5) and are not ASIS units.

54.110 STATE CONSULTATION AND SERVICE

(1) However, the superintendent and his co-workers must be alert to the possibilities of assistance from the State Department of Education which has two general and broad objectives: (a) To provide over-all leadership and guidance and (b) to give specific service whenever possible.

(2) In meeting the leadership objective, the Division of Special Education is ready for consultation with individual superintendents and their staff:

(a) To give interpretation of the instructional services required by handicapped children in each classification, the needed physical facilities, the importance and kind of special equipment and instructional materials and aids, and basic housing consideration.

(b) To prepare school personne, parents, and the community for acceptance of educational provision for children with moderate to gross deviations from the average.

(3) The local school district, in asking the State Department of Education to fulfill the service objective, may secure help from staff specialists in:

(a) Identification and classification of handicapped children in the school and the community;

(b) Preparation of materials of assistance to teachers, parents, board members, and the community;

(c) Implementation of a balanced in-service program dealing directly with instruction of handicapped children for all school personnel;

(d) Clarification and use of "lines of communication" making possible assistance from related organizations in care of handicapped children, e.g., Crippled Children Commission, University of Kentucky Speech and Audiology Clinics, Kentucky Schools for the Deaf and Blind, Kentucky Training Home (mentally deficient), and others;

(e) Evaluation of the various classroom units for exceptional children in school districts providing special education services.

54.120 PLANNING THE PROGRAM

(1) To know the numbers and types of exceptional children in a school district and to recognize the need for instructional programs for these children, certain information is necessary. How many children with handicaps may we expect to find in the juvenile population of any community? What professional authorities should help assess the child's physical and/or mental handicap? What type of special education setting or school placement should be provided for children with handicaps?

(2) The following diagram should prove to be a helpful guide in answering some of these questions:

CLASSIFICATION	RECOMMENDED PROFESSIONAL EXAMINER	POSSIBLE SCHOOL PLACEMENT	APPROXIMATE NO. IN JUVENILE POPULATION
CRIPPLED AND SPECIAL HEALTH PROBLEMS	Orthopedist Pediatrician Neurologist Family physician	Crippled children class in elementary or secondary school; home or hospital instruction; regular class if condition is mild	1 or 2 in each 100
HOMEBOUND AND HOSPITALIZED	Pediatrician Heart Specialist Neurologist Orthopedist Family physician	Home Instruction Hospital Instruction	1 or 2 in each 100
EDUCABLE MENTALLY RETARDED	Psychologist Psychometrician	Special class in elementary and/or secondary school	2 in each 100
TRAINABLE MENTALLY RETARDED	Psychiatrist Psychologist Psychometrician	Special class in elementary school or other approved facilities	1 in each 300
BLIND	Ophthalmologist Optometrist	Kentucky School for the Blind; public school Braille class	1 in each 5000
PARTIALLY SEEING	Ophthalmologist Optometrist	Special class in elementary and/or secondary school	1 in each 500
DEAF	Otologist Otolaryngologist Audiologist	Kentucky School for the Deaf; private residential school; class for deaf in elementary or secondary school	1 in each 200
HARD OF HEARING	Otologist Otolaryngologist Audiologist	Special class in elementary or secondary school; lip-reading and auditory training while in regular class	4 or 5 in each 100
SPEECH HANDICAPPED	Speech Correctionist Speech Pathologist	Regular or special class with provision for speech correction	5 or more in each 100
NEUROLOGICALLY IMPAIRED	Psychologist Neurologist Pediatrician Audiologist Ophthalmologist Speech Pathologist	Special class in elementary or secondary school	No National Figures as yet

54.130 DETERMINE NEEDS FOR SPECIAL EDUCATION

(1) The first step is to make a comprehensive survey of the juvenile population in the community to determine the number and type of exceptional children who need to be enrolled in special education programs. This survey must include those children who are not enrolled in school, as well as those who are enrolled, since many of them may not be in attendance because the school has not had a suitable type program to meet their needs. The pre-school population should be surveyed also.

(2) Special techniques for the selection of children for special education programs are discussed under the headings devoted to the various types of exceptional children.

54.140 EXAMINATION BY PROFESSIONAL AUTHORITY

Those children discovered through the survey should be examined by the appropriate authority (see chart on page 8) to determine the current status and future prognosis of the child in view of his receiving special education. Records from the examining authorities should be kept on file in the local school district.

54.150 SELECTION

Select from the records and school progress reports those children who can best profit from special education programs. This selection and decision as to school placement is the function of an Admission and Release Committee.

54.160 ADMISSIONS AND RELEASE COMMITTEE

(1) The most advantageous manner of determining placement, admission and release of children from special education programs is the "Admissions and Release Committee". This committee may function in a group setting or by other coordinated plan and should be made up of the following: (a) The superintendent or local supervisor of special education, (b) the building principal, (c) a qualified psychologist and/or guidance counselor, (d) the special education teacher and the classroom teacher who last had the child enrolled, (e) other professional personnel concerned with the class or the individual child.

(2) Factors pertinent to placement or release of children to/from special education facilities are discussed in detail under the sections dealing specifically with the various classifications of exceptionality.

(3) If there is any question as to the child's status or his ability to profit from special education, he should receive a reasonable trial period in the properly selected classroom unit for exceptional children.

54.170 CRITERIA FOR CLASSROOM UNITS

(1) The criteria for classroom units for exceptional children authorized by KRS 157.360, sub-section (5), are for the guidance of superintendents in planning instructional programs to include classroom units for the various classifications of exceptional children.

(2) The administration and supervision of special education programs for exceptional children are the primary responsibility of the local superintendent of

schools, in accordance with laws and State Board of Education regulations.

General Provisions. (1) Classroom units shall be allotted on the basis on an approved teacher.

(2) An approved teacher is one who devotes full-time or a fractional time to instruction for exceptional children in accordance with State Board of Education regulations pursuant to KRS157.200-157.290 and KRS 157.360(5). The teacher shall have the required special preparation for the type of exceptionality of the children enrolled in the unit.

(3) Classroom units shall be allocated on the basis of a planned program as determined by careful study of educational needs of children with handicaps.

(4) Each unit shall serve one classification of handicapped children as follows:

(a) Children with crippling conditions (orthopedic crippling, accidental crippling, cerebral palsy, cardiac onditions, etc.) Children with special health problems (rheumatic fever, nephritis, hemophelia, asthma, etc.) may be included.

(b) Children who are hard of hearing.

(c) Children who are deaf.

(d) Children who are partially seeing.

(e) Children who are blind.

(f) Children with speech handicaps (faulty articulation, stuttering, delayed speech, etc.)

(g) Children who are educable mentally handicapped. Children who because of retarded intellectual development, as determined by recognized standardized tests, are incapable of being educated through ordinary classroom instruction or special education programs for educable mentally handicapped children but who may be expected to benefit from training in a group setting designed to further their social adjustment and economic usefulness in their homes or in a sheltered environment. Also used to refer to that group of mentally retarded obtaining IQ scores from 35 to 50 on recognized standardized individual tests of intelligence.

(i) Children who are homebound by physical defects which make school attendance either in special classes or regular grades impossible may receive instruction in the home. A home instruction unit may be allotted when a qualified teacher is employed on a full-time basis. A fractional unit may be allotted in the event that a home instruction teacher is employed on a part-time basis.

(j) Children who are hospitalized for care and treatment and who are able to participate in a special education program may be included in a hospital instruction program.

(k) A combined program for home and hospital instruction may be established when there are not sufficient children for a full unit in either of these categories, or when it appears advantageous otherwise.

(l) On the basis of the major handicap, children with multiple handicaps may be enrolled in the units which can best serve the child.

(m) Children who are neurologically impaired. Children who because of a neurological impairment, as determined by necessary tests, may be unable to function in a regular classroom, but who may be able to benefit from a individualized structured program that would enable them to grow emotionally, educationally and functionally to such an extent that they may be able to return to a regular classroom in a year or two.

(5) Classroom units for exceptional children vary in size according to the type and severity of the disability. Full-time or fractional units may be approved in accordance with State Board of Education regulations. (Refer to page 5.)

Qualified Personnel

(1) Units may be allotted to districts meeting the requirements of KRS 157.360(5), 157.200-157.290, and State Board of Education regulations.

(2) An approved teacher for classroom units for exceptional children shall have the Special Education Certificate appropriate to the classification of children in the instructional unit; or teachers employed prior to April 12, 1952, may teach classes for exceptional children "on any valid teaching certificate in the area of special education in which he has been employed and/or in which he has had previous experience".

(3) The teacher of Home Instruction and/or Hospital Instruction may serve on a regular elementary certificate if the majority of the children are of elementary school age or on a secondary certificate if the majority of the children are of high school age. It is recommended that these teachers qualify for special education certificates. (See Certification Bulletin)

(4) Selective employment procedures should be used in securing personnel for classroom units for exceptional children. While persons having the appropriate certificate will be employed to teach handicapped children, it is important that the teacher have particular competency in recognizing the child as an individual; skill in individualizing and organizing the curriculum for meaningful and socially useful experiences; understanding the social and emotional problems of the child and helping him in the development of acceptable social patterns of behavior; ability to counsel with the child, his parents and others who come in contact with him; and proficiency in developing practical self-sufficiency in the child.

Planned Program. The planned program for children with exceptionalities should provide for:

(1) Effective, accurate identification including diagnosis of defect by appropriate professional authority, and proper classification as to defect and ability.

(2) Necessary adjustment of the curriculum to meet individual as well as group needs and abilities.

Facilities. An appropriate instructional program for exceptional children must include the needed facilities, special equipment and materials, and proper supervision.

(1) Classroom units shall be located in a regular elementary or secondary school, dependent upon the age range of the pupils. The location of a classroom unit in other facilities must have approval from the Division of Special Education, and the Division of Buildings and Grounds, State Department of Education. Classrooms shall meet the standards for regular classrooms, as specified in State Board of Education Regulations, Chapter 22.

(3) Materials and special equipment needed for the maximum educational development of exceptional children.

(4) Transportation when necessary.

54.180 SPECIAL EDUCATION PROGRAMS BY DISTRICT OTHER THAN THAT OF CHILD'S RESIDENCE

(1) If the number of children in one classification of exceptionality in a district is not sufficient to justify a special education program in that district, or if a school district does not provide a special education program, the board shall provide instruction by contract with another county or independent district that maintains an approved special education program for that type child. When a district undertakes under operation of a tuition contract or of law to provide in its classes for these pupils residing in another district, the district of their residence shall share the total cost of the special education program in proportion to the number of pupils or in accordance with contract agreement between the two districts.

(2) The school board of the school district in which any child resides shall pay for his transportation to the class in the other school district, cost not to exceed three hundred dollars for one school year, unless the school board of the other district provides this transportation to the class, in which case the cost of transportation will be included in the total cost of the special education facility. (KRS 157.280)

54.190 SELECTION OF CLASSROOM

Survey all classrooms to locate appropriate facilities. (See sections dealing with each type of handicap for specific recommendations).

54.200 SELECTION OF TEACHER

Survey possible teaching personnel to select a well-prepared and certified special education teacher. Check qualifications with the Division of Teacher Education and Certification, State Department of Education, at an early date.

54.210 LOCAL BOARD APPROVAL OF PROPOSED PLAN

Prepare for approval of the local board of education describing the program, physical facilities, teaching personnel, general policies, procedures, rules for admission and release of pupils, for classroom unit(s) for exceptional children to be established.

54.220 COMMUNITY EDUCATION

Plan and carry out a program of community education to gain the acceptance and support of parents, civic and business organizations, public and private agencies, school personnel, and the general public.

54.230 CURRICULUM, MATERIALS, EQUIPMENT

Arrange for an adjusted curriculum for the classification of exceptional children enrolled in the classroom unit. Consider the special instructional materials and equipment needed.

54.240 APPLICATION FOR UNIT

Request tentative allotment of classroom units for the instruction of exceptional children from the State Department of Education by filling out the APPLICATION FOR TENTATIVE APPROVAL FOR CLASSROOM UNITS FOR TEACHERS OF EXCEPTIONAL CHILDREN in accordance with KRS 157.360(5). It must be remembered that classroom units for exceptional children are not ASIS units and are allotted on the basis of need, approved teacher, facilities, etc., as outlined in the criteria.

54.250 CERTIFICATION OF UNIT

Activate the classroom unit after receipt of "Tentative Approval" from the State Department of Educatinn. Keep all records, curriculum plans, etc. readily available for audit by the Division of Special Education. The Division will evaluate the program and certify final approval of the unit.

54.290 SPECIAL CLASSES FOR EDUCABLE MENTALLY HANDICAPPED

(1) Definition. (a) Special classes are for educable mentally handicapped children who because of retarded intellectual devopment, as determined by recognized standardized tests, are incapable of being educated through ordinary classroom instruction but whose intellectual ability would indicate a degree of scholastic attainment with the benefit of special education methods and materials. Also used to refer to those mentally retarded children who may be expected to maintain themselves independently in the community as adults. (b) These mentally retarded children would obtain IQ scores between 50 and 75 on recognized standardized individual tests of intelligence.

(2) Age Range: 6 - 21 years.

(3) Class Size (Membership): 15 - 20 children per teacher.

(4) Screening Considerations: (a) Is he a "repeater", is he two years or more behind his age group? (b) Has his intellectual capacity been assessed by a qualified psychological examiner or guidance counselor? Has he the intellectual capacity to master reading, writing, and arithmetic? (c) Has he the potential ability to acquire second, third, or fourth grade achievemnnt by the age of sixteen? (d) If the child is between the ages of seven and eleven years and has a mental age between four and eight, can he function in a beginning academic program?

If the chronological age is from thirteen to sixteen and the mental age is from eight to eleven, can instruction be planned to provide a working knowledge of skill subjects, health and physical needs, social and vocational needs? (e) Is his speech and language adequate for most ordinary situations? (f) Is there evidence that he can become independent or nearly independent economically and socially?

(5) Class Placement: (a) Group tests of intelligence and achievement should be administered locally. Teachers' opinions, principals' evaluations and parental requests are considered an integral part of the screening process. (b) Children with low scores on group intelligence tests (below 75) and who have school failure records, should be referred to a qualified psychologist for an individual psychological examination. If the services of a qualified psychologist are not available locally, arrangements for this testing should be made with the staff of the Division of Special Education, State Department of Education. (c) Children whose intelligence is at the borderline (either 50 or 75) may be placed in the special class for educable mentally retarded children on a trial basis. (d) The Stanford-Binet, 1937 or 1960 Revision, shall be used with all educable mentally retarded children under 12 years of age. Either the Wechsler Intelligence Scale for Children(WISC) or the Stanford-Binet shall be used for all educable mentally handicapped children over 12 years of age. Other tests may be used in addition to the Stanford-Binet or WISC. (e) Other tests which help to diagnose the child's school failure are batteries of achievement tests in basic tool subjects, audiometric tests, vision tests, general medical examination, neurological and/or psychiatric examinations (if indicated by psychological or medical examinations), and social casework study. (f) After a careful study of all tests and existing records, the decision to place a child in a special class should be made by the Admissions and Release Committee.

(6) Classroom Considerations: (a) Classes for educable mentally retarded children shall be housed in a regular school building, dependent upon the age range of the pupils. (b) Classrooms should be located in the school building so that the mentally retarded are not segregated from the non-handicapped children. (c) Classrooms should be housed in a centrally located building in school districts where it will be necessary to transport children from other areas of the district. (d) Classrooms should be standard size or larger. (e) There should be sufficient floor space for movable desks for the total class enrollment and for equipment desirable in the teaching of the mentally retarded. (f) Provision should be made for running water, electrical outlets, work benches, etc., as well as ample storage space.

(7) Instructional Aids: (a) Adaptation and simplification of regular instructional materials necessary to provide simplified "step-by-step" and "concrete" presentation of the "three R's" in the academic training of the educable mentally retarded. (b) Pupil-interest-experience materials, visual aids, practical arts and crafts materials and elementary music materials are valuable instructional aids. (c) Provision of "elementary" reading materials to supplement regularly supplied books are necessary to provide practice and to maintain interest for children who must repeat reading experiences many times before the abstract symbols become meaningful. Many of these materials should have a high interest level but a low vocabulary level. (d) Classroom laboratory experiences with greatly simplified equipment and materials in concrete form for repeated manipulation are most necessary. (e) Classroom laboratory experiences leading to

practical application of the mechanical processes in the various possible vocational fields are suggested as basic to the instruction of educable retarded children, e.g., homemaking--cleaning and care of the classroom, planning and preparing simple meals, shopping, washing, ironing, child care. Woodwork--simple cabinet-making, rough carpentry. Agriculture--gardening, simple landscaping, farm "chores". Electronics--repair of household applicances, helper in radio and television. Metals--plumber's helper, machine shop assistant. Automotive--automobile repair, car wash, "grease-monkey".

EDUCABLE MENTALLY RETARDED CHILDREN

The aims of Special Education for the educable mentally retarded child are basically the same as that of all education: to teach the individual how to live better; to teach him how to use all his capacities; and to teach him how to become a useful member of his social group.

Objectives:

1. To teach the pupil to read, write, and figure to the maximum of his ability in order that he can eventually get a job.

2. To teach him to get along with people through situations involving social responsibilities. He must learn specific habits in school which will serve all through his life such as punctuality, regular attendance, responsibility, fairness, self-control, and truthfulness.

General rules for achieving these objectives that must be applied in each class at primary, intermediate, junior high or senior high levels:

1. The body of knowledge to be gained is to be reduced to the essentials.

2. No class can work in one large group in every area of instruction. These children must be grouped according to their abilities in the particular area of instruction.

3. Daily plans must be made and there must be a definite purpose for each lesson.
4. Instruction can be given more effectively by using concrete methods.

5. Constant drill and repetition are needed.

6. Learning can come only through actual experiences.

Other factors which affect the potential of the mentally retarded child for achievement and adjustment include failure and frustration in and outside of school, socioeconomic background, physical and emotional maturity, and personal-social attitude of the child himself. Recognition of such factors is important in the development of a desirable program of education to assist in bringing the mentally retarded child to realize his full potential.

Since a mentally retarded child learns at a significantly slower rate and at a lesser depth level than does the non-handicapped child, the program of instruction must provide for the development of understnadings and skills commensurate with the mental age of the pupil, and at interest levels more closely related to his chronological age.

In determining the intellectual status of a child, the I. Q. is of very limited service to the teacher. Mainly, the I.Q. is used as a basis for preliminary classification and for estimating the child's rate of mental development. The preformance and behavior of the educable mentally retarded child may very well fluctuate between his mental age and his chronological age depending upon the nature of the task and/or of the situation in which he is involved.

In planning teaching and learning experiences, the mental age is more indicative of what a mentally retarded child can do than is the chronological age or the intelligence quotient. However, all three of these should be considered in planning an effective and efficient instructional program.

The child's mental age is the best single criterion for establishing his academic status; for determining the level of materials; for assignment to group activities; for an allocation of time in the daily program of instruction and activities; and for the development of acceptable social habits.

A good rule to be used in estimating the child's mental age between testing sessions is to multiply the child's age in months by his last I.Q. on record and divide by 100. Example: A child tested 10years (120months) who had an I.Q. of 60 would have a mentl age of 6 years (72 months).

$$\text{Formula} \quad MA = \frac{\text{I.Q. x age by months}}{100}$$

Behavior and attitudes most often shown by educable mentally retarded children include self-defaluation, short attention span, poor memory, over agressiveness, and delayed language development.

These children are educable which means that they have the potentiality to profit from learning situations that take in to account all of the above mentioned characteristics as they exist according to frequency and intensity for each individual.

I. PRIMARY LEVEL

Children placed in the primary classes may have chronological ages ranging from 6 to 10 years and mental ages ranging from 3 to 7 years and 5 months. With mental ages such as these the corresponding grade placement would be nursery school through first grade. Therefore, a teacher of a primary class must provide learning experiences for pupils with widely diversified potentialities, interests, abilities and achievements.

For the mentally retarded child, experience which builds toward learning is likely to be meager. Many of these children come from homes where parents have neither the knowledge nor the means to provide an adequate developmental background for learning.

See ing, hearing, touching, smelling, and/or tasting are the direct contacts through which a child may explore and discover information. These contacts are unquestionably the best kind of indroductory learning. Concrete experiences are necessary for children to develop an awareness of their environment. It is only through these experiences can we move into indirect experiences for concept development.

At the primary level is the time to develop and re-inforce the intellectual, physical, and social readiness of pupils.

READINESS

A. SENSORY MOTOR READINESS[1]

1. Gross Motor
   including learned:

   Skills
   Appropriate posture; movement of fingers, hands, wrists, and arms in

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[1] Kephart, Newell C., The Slow Learner in the Classroom. Columbus, Ohio: Charles E. Merrill Books, Inc., 1960, pp. 21-31.

Skills (Continued)

coordination fashion; integrating specific responses to produce a complete response; moving the finger, arm, and hnnd differentially, yet precisely.

Activities to Develop Skills

Use of a balancing board
Use of walking board
Creeping, crawling, jumping, hopping, skipping, running, climbing and swiming, throwing, catching, kicking a ball

Planning a Program for Large Muscle Activity:

1. Each child knows from brief, simple directions where he is to be at each moment, how to get there, what to do, and how to get back;
2. Neither the skill needed in the activity nor the amount of waiting for his turn be beyond his capacity;
3. The amount of stimulation from noise, movement, laughter, and so on, is kept within the endurance of the less stable members of the group;
4. Provision for skill variations is made where possible.

The activities listed here are arranged roughly in order of the extent to which they meet these requirements.

Outdoors

Pre-Kick-ball. Players form a line and take turns kicking to the pitcher. This is probably plenty to start with. When the group is able, add the step of running to a base, then two, then three. How many days it will take to move into kick-ball depends a good deal on how soon there are enough catchers to do the necessary minimum of fielding.
Catch-ball and Roll-ball. Same as above but the players catch the kick-ball and throw it back to the pitcher. In roll-ball they roll it.
Track meet. Children run around the black top, or playground as many times as seems to fit each child. All can run together, but this is not a race. Competition means only trouble for most of the children, and it is important--particularly at first--to eliminate it in every way possible. Hopping, skipping, jumping, running with arms outspread, and so on, can vary the activity.
Jungle gym or bars. The children play tag in and around the jungle gym. This keeps the game within a limited area so that more people are tagged, and it encourages clumbing.
Call-ball. Each player has a number. The one in the middle calls a number, throws the ball in the air, and the child who has the number tries to catch it.
London Bridge, Duck, Goose, Red Rover, Ring Around a-Rosie. These and other familiar games involve valuable practice in co-ordination for this group.
1-2-3. Players in a circle are numbered one to three. The teacher (until a child can do it) calls "All the one's run" (or two's or three's). All with the number called must try to run around the circle and back to place before another child who is "it" can catch them.
Relays. These can be arranged more easily outdoors. Walking, hopping, skipping can replace running. Farmer and Crows may be possible late in the year. First children in line are farmers, who "plant seed" (four counters) about 10 feet in front of the lines. Next ones are crows who eat them up, i.e., pick them up and return them one at a time to the third children who replant them, and so on until the first children are back in

Activities to Develop Skills (Continued)

front. Make sure in playing a second round that places are moved to give each child a turn at each activity.

Indoors

Following directions. Children sit at own desks and take turns carrying out some action command: hop, skip, jump, place arms, legs, torso, and so on, in various positions. This is a good way for the teacher to find out what skills she needs to teach.
Calisthenics. Records are helpful in this. Exercises should include as wide a range of muscles as possible, not forgetting hands. Later lessons stumulation and frustration, slow rhythms should come first. The children will tire very quickly, especially at first. Rest on mats should probably follow. Mats are also useful in keeping each child in his own place. More advanced people can do further exercises while others rest and watch.
Marching, clapping, walking, skilling, running. These activities are accompanied with motions of arms: elephant walk, duck walk, and so on, preferably to music.
Balancing. Have children walk on line or 2 by 4-inch board. (A lumber yard will make wodden supports or slots to hold the board up on its narrow edge for that step.)
Eraser-bowling. Children sit in 2 rows to form an alley down which players take turns rolling kick-ball to knock down 3 or 4 up-ended erasers. Teacher, or child if possible, keeps tally on board. Best score out of 2 tries gives better chance of success and reduces frustration. The distance of the roll should vary according to the skill of each player.
Chair-ball. Same formation as above. Roll the ball under 1, later 2 chairs from whatever distance is appropriate to the skill of the player. Keep score as above. Two tries as above.
Erasers-in-basket. Same formation as above. Toss erasers in empty waste-basket from most feasible distance. Keep score. This game may be only for 2 or 3 more physically skilled, while the rest of the group play something else.
Building. The children use desks, chairs, tables, and so on, to build tunnels for crawling, trains, rocket ships, and so on. This activity comes later in the year, about in time for long periods of indoor weather. By this time the children have developed their own leaders and can use this as independently creative play with much opportunity for conversation and invention.
Care of room. Erasing and washing boards. Washing lunch tables or sink. (Running water is a great distraction to many of the children. Any activity which involves it needs careful control.) Picking up papers and crayons, putting chairs onto tables and down again.

Small Muscle Activity:

Most of these are self-explanatory:
1. Folding
2. Cutting
3. Dealing and holding cards
4. Block building (both large and small blocks)
5. Picking up things (pegs, paper, beads)
6. Squeezing sponge ball
7. Finger and wrist activity
8. Lacing and tying

Activities to Develop Skills (Continued)

9. Winding a spool
10. Weaving
11. Tapping
12. Blow down and pick up (fold little pieces of paper, have child blow them down, then pick them up)
13. Speech muscles*
14. Eye exercises* (following target with eyes without moving head, in horizontal, vertical, and oblique planes)
15. Foot exercises* (marching)
16. Eating (chewing, using tools, sorting, stacking, carrying plates, trays)

*Give motions to imitate as in "Follow Directions" or "Simon Says".

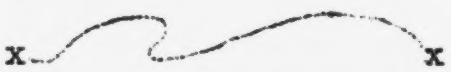
2. Eye-Hand Coordination including:

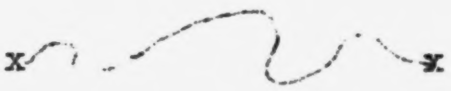
Skills

The ability to control the two sides of the body separately and simultaneously; the ability to locate the beginning point; the ability to control motor activities in terms of directional clues; the ability to stop; the ability to match the pattern of eye movement to the kinesthetic pattern in the organism.

Activities to Develop Skills

Ocular Pursuit Training. Following a moving target with first one eye and then other eye occluded without moving the head. This target must be moved vertically and horizontally and the child must be trained to keep his eye upon it. If he has difficulty, touch the target with his finger and then follow with eye. After he has mastered this with each eye, train for both eyes. /2/,/3/
Chalkboard training. Moving a toy car along a heavy horizontal line about 12 inches long at the child's eye level. Ask the child to stand so eyes will be on the level with the center of the line. Hold child's head gently but firmly so that it will not move. (Continue to do this until he is "able to drive with his eyes without moving his head.") Practice with first left hand then right hand. After he has mastered the straight line, the lines should increase in complexity.





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[2] Simpson, Dorothy Margaret, Perceptual Readiness and Beginning Reading. Purdue University, 1960, pp. 12-45.

[3] Kephart, Newell C., The Slow Learner in the Classroom. Columbus, Ohio: Charles E. Merrill Books, Inc., 1960, pp.241-257.

Activities to Develop Skills (Continued)

Any game or sports activity which involves following a moving object and requires the child to keep the moving object constantly in view can be used. Volley ball, basketball, kick ball for example.

3. Temporal-Spatial Translation
including:

Skills

The ability to deal with two different conditions of organization: (a) a simultaneous organization in space, and (b) a serial organization in time.

Activities to Develop Skills

Block designs
Matching
Cut-apart geometric forms to assemble
Matching sizes
Matching colors
Matching objects
Matching forms
Teach child to walk half-way
Walk all the way
Find which is nearer or farther away
Help him find the top, the bottom, the front, the sides, the back
Train him to put things in, on, under, over, in front of, behind; to find which is bigger, heavier, which is the highest, the smallest.
We stress relationships, sequences, and putting things in order.
Teach him sequence of time, of numbers, of letters and size of weights, degree of softness and hardness, etc.

4. Form Preception
including:

Skills

The ability to develop the contour, maintain the figure, ground relationship, and to differnetiate the various parts of the figure.

Activities to Develop Skills

Puzzles. Use teacher-made puzzles of very simple pictures, also commercial ones chosen with a minimum of detail.
Stick figure designs. Child constructs a geometric design with sticks like one prepared by the teacher.
Pegboard designs.
Use of templates. Templates are made from heavy cardboard in the various gemometric degigns. The one he is to work on is scotch taped to chalkboard. The child follows the form until he is able to reproduce one the same size as the one on which he has practiced.

He also should walk a design, hop it, crawl it, or do any thing that will help him to reproduce a form or symbol. He should then be able to reproduce any form at his desk.

B. LANGUAGE ARTS

Experiences in Communicative Skills -- Educable mentally handicapped children need many experiences in the communicative skills: listening, observing, speaking, reading, writing, and spelling. Major emphasis should be placed on the listening, observing, and speaking skills instead of the reading, writing, and spelling skills as these children throughout life will depend more on the first three listed skills in receiving and giving information than the latter three skills.

1. Listening

Skills (3 levels)

Recognize the need for listening.
Recognize and respond to his own name.
Develop a sensitivity to familiar sounds in the classroom, school, playground, and street.
Listen to follow a simple direction.
Listen for enjoyment to stories, nursery rhymes, records, and rhythms.
Develop an appreciation of rhythmic patterns in sounds and words.
Listen attentively to the experiences of others.
Develop a deeper sensitivity to familiar sounds.
Listen and react to directions.
Distinguish between the school bell, the fire drill signal, and the air raid signal.
Recognize words that rhyme.
Listen for words that begin with the same sound.
Listen for enjoyment to stories, nursery rhymes, folk tales, records, rhythms, and simple poems.
Develop his understanding of responsibilities of the speaker and the listener.
Develop his ability to listen with understanding.
Listen to stories on records and radio.
Listen to and retell simple stories.
Listen for the purpose of reproducing what is said.
Listen for the purpose of carrying out more complex directions.
Listen for enjoyment.

Activities to Develop Skills

Discussing values of listening:
- (a) Getting information one needs to become a member of a group or to attempt a task
- (b) Contributing to a group situation
- (c) Dramatizing "What happened when I did not listen"
- (d) Showing a completed work sheet in evaluating effective listening
- (e) Discussing the importance of listening for and observing traffic signals, bell, etc.

To follow directions
Dramatizations
Enjoying a story
Arrange seating
Clearing desks
Getting comfortable
Making hands and feet "listen"

Activities to Develop Skills (Continued)

Looking at speaker
Keeping objects out of hands
Discuss appropriate responses:
  (a) Nodding
  (b) Clapping
  (c) Laughing at appropriate time
  (d) Asking questions
  (e) Commenting
Speaking with the group in choral speaking
Delivering messages orally from classroom to classroom, or classroom to home
Discussing the statement: Listen to others as you would have them listen to you.
After viewing a film, hearing a story or an announcement or watching a demonstration, check for the main ideas and answers to questions
Following plans that were set up in teacher-pupil planning
Dramatizing or carrying out simple directions
Retelling events or a story in time sequence
Recalling ideas
Telling or drawing the part of the story that made one laugh
Enjoying the lilt of words in poetry or song by acting out the rhythm
Drawing pictures of a story or poem after the teacher has read it aloud
Answering such questions as:
  (a) How did the lines about the wind make you feel?
  (b) What did the song make you see?
Finishing an interrupted story
Relating one's own experience to the one in the story
Playing guessing games in order to identify familiar objects by correct names
Saying, telling, and acting out the meaning of new words learned in discussions and stories
Telling new things learned from listening to a story or watching a film
Participating in "show and tell" time
Discussing and/or dramatizing behavior, care of materials and equipment, etc.
Telling why a program, recording, party, game, or film was enjoyed
Answer such though provoking questions as:
  (a) Did Jim do the right thing to pick up the baby bird?
  (b) Would Jill have been happier if she had stayed at home?
Examining finished work to evaluate how well directions were followed.

2.

Speaking

Skills (3 Levels)

Associate meaning with the spoken word.
Speak audibly without excessive shyness.
Speak clearly, working toward eliminating baby talk.
Attempt to control excessive verbalization.
Enjoy conversation about actual and vicarious experiences.
Talk about activities planned for the day.
Act out nursery rhymes, familiar stories, and poems.
Begin to use a few suitable courteous expressions.
Speak audibly and with greater ease.
Extend his ability in use of conversation.
Talk about activities planned for the day.

Skills (Continued)

Relate personal and group experiences.
Enunciate distinctly, expecially the beginnings and endings of words.
Participate in dramatic play, "show and tell", and dramatization of stories.
Extend the use of courteous expressions.
Develop his speaking vocabulary.
Show more poise and self-confidence in speaking.
Tell a story or an experience with greater detail and accuracy.
Extend his ability in conversation.
Further develop his ability to enunciate consonants clearly.
Dramatize stories, poems, and personal experiences.
Develop courtesy practices.
Retell familiar stories.
Extend his speaking vocabulary.
Speak simple poems in groups and individually.
Participate in daily plans.

Activities to Develop Skills

Exchanging ideas in making plans:
- (a) Making daily plans
- (b) Planning a trip, party, or playhouse

Telling a story in time sequence; telling the part of the story one enjoyed the most.
Saying jingles and rhymes
Making an announcement telling who, what, where, when, why
Showing and telling how something was made
Dramatizing familiar rhymes, and supplying words to finish rhymes
Participating in finger plays and choral speaking
Saying poems from memory
Composing and reading sentences
To develop proper usage
To eliminate gross grammatical errors from speech:
- (a) The boys aren't here. (ain't)
- (b) I saw Jimmy in the hall. (seen)

Joining in exchange of ideas in informal conversations, discussions, and new periods
Saying familiar rhymes and jingles
Explaining the story one's picture tells
Naming individually or collectively the pictures on speech cards and charts
Composing and saying together nonsense rhymes to practice difficult ending consonamt sounds
Recounting with teacher guidance, experiences that serve as background for story to be read
Reading aloud a part of the story in which the characters are talking
Dramatizations:
- (a) At home
- (b) At school
- (c) At church

Joining in group conversations, discussions, and news periods
Dramatizing a telephone conversation, then checking, with group assistance, these points:
- (a) Did I hold the receiver correctly and speak directly in the mouthpiece?
- (b) Did I greet the person?

Activities to Develop Skills (Continued)

(c) Did I tell who I am?
(d) Did I speak clearly and naturally?
(e) Did I tell what was wanted?
(f) Was I polite?

Listing and saying collectively, then individually, words one uses when talking on the telephone:

hello
who is
that is
will you
do you
good bye
call her
thank you
call him

Dramatizing simple introductions

(a) Miss Brown, this is my brother, Robert.
(b) Mary, this is Sue.
(c) Mother, this is my teacher.
(d) Jerry, this is Tommy.

Actual classroom situations and dramatic play:

good morning
hello
goodbye
thank you
please
excuse me
I'm sorry
yes(instead of un-huh or yeah)
no (instead of nope)

Pantomiming a nursery rhyme or play

Participating in dramatic play: school, house, store, doctor's office, and playing Indians

3. Word Perception

Skills (3 levels)

Develop gross auditory discrimination.
Develop gross visual discrimination.
Develop auditory memory.
Develop visual memory.
Become aware of top-to-bottom arrangement.
Become aware of front-to-back progression.
Develop auditory discrimination of specific sounds--beginning sounds and rhyming words.
Develop specific visual discrimination--recognize likenesses and differences of objects; associate simple words with familiar objects.
Develop, through practice, auditory and visual memory.
Develop left-to-right eye movement.
Recognize and use top-to-bottom arrangement.
Recognize and use front-to-back progression.
Note relative position of objects in pictures.
Begin to build a sight vocabulary through configuration clues and context clues.
Develop, through practice, auditory discrimination (ending sounds).
Develop, through practice, visual discrimination (recognize likenesses and differences of words).

Activities to Develop Skills

Awareness of gross sounds. Instruments of different frequencies are used such as a bell, a drum, a whistle, and a horn. One instrument is used at a time to reveal awareness. The child plays with and sounds the instrument, and is taught to respond motorically while watching as the teacher produces the sound. When the child has been conditioned and while his back is turned, the teacher sounds the instrument and waits for his response.

Awareness of finer sounds. The above procedure is repeated, with the gross sounds replaced by little sounds such as:

wooden beads dropped into a tin
small glass beads dropped into a jar
pebbles rattled in a box
the squeak of a rubber animal
the spoon stirred in a cup
the rustling of papers
the jangling of coins

Awareness of voice and speech. We train the child to give a motor response to speech sounds, to nonsense syllables, to digits, and to words and phrases. The hearing tube may be used here, to focus the child's auditory attention and to give him the "feel" of amplified voice. Children who resist responding to voice will sometimes respond when a singing voice is used.

Discrimination of gross sounds. We encourage the child to listen to, and handle, two or more sound instruments. Then his back is turned. The teacher now sounds one instrument and replaces it on the table. She taps the child, who has been trained to wait for this cue. He picks up, or points to, the instrument heard.

We use sound instruments in training for discrimination pitch, intensity and tempo. A drum, piano, or xylophone are best suited to this training. The child stands well away from the stimulus. His back is turned. Motor responses are used. After alerting, the child responds to high or low notes or chords on the piano by making a mark at the top (for high) or at the bottom (for low) on a chart. Discrimination of pitch may also be trained by teaching the child to strike high or low notes on a xylophone. in imitation of sounds made by the teacher on a larger, louder xylophone.

The child is trained to respond to loud or soft chords on the piano or loud or soft beats on the drum by marking on a chart. Long vertical strokes may be used for loud sounds and short strokes for soft.

The child may also respond to intensity changes by imitating on his own drum the loud or soft pattern sounded on the teacher's drum.

The child responds to fast or slow tempo of drum beats or chords on a piano by marking in the proper column on a chart. He may also respond to tempo changes by imitating on his own drum, the fast or slow rhythm sounded on the teacher's drum.

Discrimination of finer sounds. We use the same little sounds listed under "awareness." We encourage the child to watch and listen as two or more sounds are made. His back is turned. The teacher produces one sound, then taps the child. He is to identify by pointing to the correct sound maker.

Discrimination of voice and speech patterns. Two familiar speech sounds as b and o are used, and the printed forms of these sounds are shown to the child. The teacher says one of the sounds into the hearing tube. The child responds by pointing to the correct printed form. Vary the sounds. For very young children, the animal sounds "moo" and "baa" may be used. A toy cow and sheep are placed before the child. He is trained to pick up the appropriate toy.

Activities to Develop Skills (Continued)

Proceed as above, using a one-syllable, and a two-syllable word in place of the speech sounds.

When the child can identify these correctly, add a three-syllable word. Again for very young children toys may be used. The child identifies the sound heard by pointing to the correct toy (car, airplane, choo-choo train). Use two, then three one-syllable words, having different vowel sounds. Follow this with discrimination of phrases and sentences. As the training proceeds the sentences may be made longer and more varied.
Discrimination of musical instruments. Recordings on which the sounds of several instruments are clear and distinct may be used for discrimination. The child is trained to imitate the instrument heard by using gestures of beating a drum, playing a piano, or blowing a horn.
Auditory memory. Cards with markings representing variations of loud-soft or high-low patterns are placed in a pocket chart. After alerting and with his back turned, the child listens to a loud-soft or high-low pattern played ona piano or drum. He is asked to select the correct card. We start with two cards, each representing a two-sound pattern. We increase the difficulty as training proceeds.

Auditory memory may also be trained by teaching the child to imitate the number of beats or the loud-soft rhythm played on a drum. When he understands the procedure, the child must turn his back and try to remember and reproduce what he has heard.

Auditory memory for voice and speech may be trained by encouraging the child to listen, and then to repeat:
a number of nonsense syllables
a change in pitch; e.g. ah--ah (the first pitched high, the second low)
a series of digits; e.g. six, seven, eight
a phrase; e.g. "on the bus"
a sentence; e.g. "It's time for lunch."

Plan cooperatively school routines.
Listen to sounds in the room.
Take walks to observe and listen to nature sounds.
Listen to rhymes, music and stories.
Develop and listen to teacher read experience charts.
Provide opportunity to explore sensory experiences.
Tell picture stories in sequence.
Take turns completing short stories.
Watch traffic lights and obey traffic rules.
Follow directions (children wearing blue - skip to the coat room).
Handle beads, blocks and balls of different sizes and shapes.
Associate shapes with objects.
Discuss differences in size, color and shapes of objects.
Identify sounds without seeing the source of the sound.
Listen to and imitate the differences in sounds.
Find and use rhyming words.
Auditory perception.
(a) Enjoying Mother Goose rhymes and other jingles.
Understanding that certain words rhyme.
(b) Hearing beginning sounds; Hear likenesses in the beginning sounds of words such as boy--bear; dog--doll; shoe--should

Activities to Develop Skills (Continued)

(c) Naming pictures that begin alike.
The children can cut out pictures that begin alike and paste them in a picture dictionary.
The teacher can hold up pictures and have the children name the ones that begin the same way.
On a large sheet of oaktag, pictures of such things as fish, fork, fan, feathers, may be pasted and the children can name tham and suggest other words that begin the same way.
The name of the picture may be printed along side the picture but the children are not expected to remember the word or words.

Visual perception.
Matching like objects, colors, pictures.
Recognizing and matching colors.
Putting puzzles together.
Matching of circle, square and triangle and association of names.

Left to right orientation.
(a) Using books, charts, chalk on blackboard, the teacher should swing her hand left to right.
(b) In marking the days on the calendar or inserting the date, the children are acquiring a sense of left to right.
(c) Counting the number line above the chalk board must always be from left to right.
(d) The teacher will hold up the paper and say, "Begin over here and write this way."
(e) Right and left-handed children must be helped to acquire the right movement.

4. Interest in Reading Through Functional Reading

Skills (3Levels)

Develop readiness through enrichment of experiential background.
Extend enrichment experiences.
Use his experiences to develop very simple reading material through chalk board and experience charts.
Develop readiness for successive stages of reading.
Continue to use experiences to develop reading material through chalk board and experience charts.
Begin the study of essential reading skills (pre-primer, primer, first reader).
Reinforce essential skills through supplementary materials.
Recognize and react to people who control traffic.
Recognize and react to stop-and-go signals.
Recognize his own mame in print.
Recognize names and duties on helpers' charts.
Interpret teacher-made daily weather bulletin.
Extend interpretation of safety symbols, such as white lines of street crosswalks, exit signs.
Become familiar with functional signs around the school, such as those on the boys and girls toilets, or his own room.
Become acquainted with the calendar.
Learn fundtional signs, symbols, and words for--
   protection and safety
   communication
   economic competence
   self-care.
Learn to summon the telephone operator in case of emergency.

Activities to Develop Skills (Continued)

Caring for own materials
Caring for the room
Playing and working with other children
Sharing with other children
Playground activities
Care of pets and plants in classroom
Trips within the building
Providing the child with actual experiences:
  (a) Visit places of interest such as the fire station, parks, grocery stores.
  (b) Participating in making a grocery store, or a playhouse.
  (c) Planning special events such as birthdays, Halloween or Christmas parties.
  (d) Using such audio-visual materials as film-strips, posters, the flannel graph, opaque projector, charts and calendars.
Labeling of possessions with child's name
Play simple games, i.e. child may hop, skip, or jump when his name is written on the chalk board
Learn to use the day-by-day calendar
Teacher can write weather story for the day
Practice the stop and go signs before taking a trip.

5. Beginning Formal Reading

A mentally retarded child should be given a readiness test. The check list from evaluating reading readiness taken from Getting Ready for Functional Basic Reading, compiled and edited by Thomas L. McFarland. Stanwix House, Inc., Pittsburgh, Pennsylvania, is very good.

Listed below are other commercial tests that are recommended:

The Metropolitan Reading Readiness Test
First Year Readiness Test - Row-Peterson and Company
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If the child rates average or above on the test, he may be started in formal reading.

It is important to have some guide as to the expectancy-level in reading for retarded children. Listed on page 124 is a table that gives some indication of the relationship of intelligence quotient (I.Q.) and chronological age (C.A.) to reading age expectancy (R.A.) and corresponding expected reading grade (R.G.).
As basic reading series for the mentally retarded child are just beginning to be published, the teacher will need to select materials from other basic reading series that will meet the needs of her group. Any instructional materials used must involve a great deal of repetition and activities in a variety of ways.

As many retarded children have experienced reading failure before coming to a special class, it is very important to choose a basic reading series that the child has not been exposed to in regular grades.

The Teacher's Guides of the chosen basic series are a valuable source of information and should be used. Beginning with the readiness books, the teacher should follow the sequence through the experience materials, charts and pictures.

RELATIONSHIP OF I.Q. AND CHRONOLOGICAL AGE TO ESTIMATED READING GRADE AND READING GRADE EXPECTANCY[4]

	Chronological Age									
	6-1/2--7-1/2		7-1/2--8-1/2		8-1/2--9-1/2		9-1/2--10-1/2		10-1/2--11-1/2	
I.Q.	R.A.	R.G.	R.A.	R.G.	R.A.	R.G.	R.A.	R.G.	R.A.	R.G.
50	3-6		4-0		4-6		5-0		5-6	
55	3-10		4-5		4-11		5-6		6-0	
60	4-2		4-10		5-5		6-0		6-7	1.4
65	4-6		5-2		5-10		6-6	1.3	7-2	1.9
70	4-9		5-7		6-4		7-0	1.75	7-8	2.4
75	5-3		6-0		6-9	1.6	7-6	2.2	8-3	2.8

	Chronological Age									
	11-1/2--12-1/2		12-1/2-13-1/2		13-1/2-14-1/2		14-1/2-15-1/2		15-1/2-16-1/2	
I.Q.	R.A.	R.G.	R.A.	R.G.	R.A.	R.G.	R.A.	R.G.	R.A.	R.G.
50	6-0		6-6	1.3	6-10	1.6	7-2	1.9	7-6	2.2
55	6-7	1.4	7-2	1.9	7-5	2.2	7-10	2.5	8-3	2.8
60	7-2	1.9	7-9	2.4	8-2	2.7	8-7	3.1	9-0	3.5
65	7-8	2.4	8-2	2.9	8-10	3.4	9-3	3.7	9-9	4.1
70	8-5	2.9	9-1	3.5	9-6	3.9	10-1	4.4	10-6	4.75
75	9-0	3.5	9-9	4.1	10-3	4.6	10-9	4.9	11-3	5.4

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[4] Constructed for Reading Guide for Special Classes, a bulletin of the Oakland, California, Public Schools dated July 1953 prepared under the direction of Marvin C. Groelle, supervisor of Special classes for the mentally retarded.

Activities to Develop Skills

Caring for own materials
Caring for the room
Playing and working with other children
Sharing with other children
Playground activities
Care of pets and plants in classroom
Trips within the building
Providing the child with actual experiences:
  (a) Visit places of interest such as the fire station, parks, grocery stores.
  (b) Participating in making a grocery store, or a playhouse.
  (c) Planning special events such as birthdays, Halloween or Christmas parties.
  (d) Using such audio-visual materials as film-strips, posters, the flannel graph, opaque projector, charts and calendars.
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The following are excerpts (with some additions) from A Guide for Teachers of Educable Mentally Handicapped Children. (Vol. I - Primary), Oklahama State Department of Education, Oklahoma City, Oklahoma, 1960:

It is important that the reading instruction is never pressured or hurried; progress should never be compared to that of the regular classroom.

A. Incidental Reading

Since some of these children may never learn more than a few words, it is important to give some training in incidental reading such as learning the stop and go signs, men and women, poison, stay off the grass, entrance and exit, girls and boys, their own house number and street, etc.

B. Experience Stories

The teacher and her pupils will plan the experience story. It may be family news--a new baby, car or even a new pair of shoes, it may be a holiday or birthday, a field trip or a school program.

The teacher writes in manuscript on the board or chart table a sentence at a time and reads it back stressing certain words. The story should not be more than four or five lines in length. She transfers it to a large sheet of lined oaktag; and if a suitable picture can be found to illustrate it, so much the better. The children will not always remember the words in the story; however, they may recall a few of them. Children who already know how to write may copy the story into their tablets. It is often wise to select a few basic words from the story for the younger ones to write.

C. Word Games

Word games are a pleasant way of achieving word recognition and mastering retention. There are many commercial word games such as those devised from the Dolch Word List or A Functional Basic Word List for Special Pupils. The teacher can make her own from words in the basic reader.

D. Weekly Readers

My Weekly Reader; Kindergarten, first and second grade are fresh, timely and interesting. They put a wealth of material at the teacher's finger tips and an entire program could be built around the paper. A teacher's guide is included. Among the varied activities the children especially enjoy the puzzles and the picture stories.

E. Games Used to Aid and Develop Reading Readiness in the Special Class

1. Words and Pictures

From oaktag cut cards measuring about 3" by 4". Look through old magazines and catalogues for pictures that will illustrate two different meanings of word, such as the trunk of a tree, and the trunk of an elephant.

Paste each picture on a card and write a short descriptive sentence under the pictures. On a third card write the work. The word card, with its two picture cards, made a "set." Make 15 sets under 15 different words.

2. Masked Pages

Cut thin paper the size of the pages in the book to be read and place it over the page. You will find that the words can be seen through the paper well enough to be able to draw boxes around the difficult words (or phrases) you want to teach. Cut out the boxes to expose the words (or phrases).

After teaching and enriching the words, have the child read them from the masked page. Remove the mask and let him read the story.

3. Old Maid

Purpose: Improve visual discrimination, build sight vocabulary.
Material: Use cards of approximately the size of regular playing cards made from tag. Make a deck of about 20 cards, with one additional card for the Old Maid.

At the top of each card print one word; on another card print the word again, making a pair. Prepare all the cards in this way--all cards having pairs except the old Maid. One word alone may be used for the Old Maid card and can be changed frequently thus eliminating the chance for memorization.

Procedure: Deal out all cards. Begin with the person at the dealer's left, take turns drawing cards, each person drawing from the person at his right. As pairs are formed, the words are pronounced and the book placed on the table. Continue until all cards are matched and one person is left with the Old Maid.

4. Authors

Purpose: Word Discrimination.

Material: Use cards of approximately the size of regular playing cards made from tag board or heavy construction paper. There are four cards in each book, and there are as many books as desired. A book consists of the four forms of a verb such as: Play, plays, played, playing. The order of the words on the card is rotated. The first word on the card is underlined and serves as the name of that card.
Procedure: Three or more may play the game, depending on the number of books in the set. Each player is dealt four cards, and the remainder of the pack is placed in the center of the table face down. Each player in turn asks another player for a particular card to be used in completing his book. If he receives the card he may call again. He continues to call the cards as long as he receives the card asked for. When he fails to receive the card, he draws from the top of the deck on the table. If the player draws the card for which he has asked, he may continue his turn by asking for other cards as before. When four cards of a book have been completed, the book is placed on the table in front of the player. When the books have all been assembled, the player having the most books is the winner. Each player is required to repeat all the words in each book.

5. Visual and Auditory Discrimination

Make charts from pictures cut from magazines, workbooks, etc. Each chart contains pictures of words beginning or ending with the same sound. They may be used to parallel the lessons in Building Word Power.

The word which describes each picture on the chart is established with the children through questions. Attention is focused on the fact that the beginnings (or endings) sound alike.

Next, attention is drawn to the words beneath the pictures. The words are pronounced by the children as they listen and look at the like beginnings (or endings).

The children are asked to tell other words which begin (or end) with the same sound.

The charts may then be displayed on the wall of the classroom to be referred to for help when working out similar words independently, later on.

6. Hobby Horse Game

Print words (or initial sounds) in four columns with the word START on the bottom and FINISH at the top. This will make a race track. Draw and cut out hobby horses so that they can stand up. Make a spinner out of oaktag by fastening an arrow to a square about 4" by 4". Write numbers along the edges of the square.

Each player selects a horse and places him at the beginning of one of the rows of spaces at the point marked START.

The players take turns spinning the numbered square.

Each player moves his horse forward the number of spaces that is indicated by the arrow when the spinner stops, only if he can pronounce the words in each of the spaces over which his horse moves.

If he does not know the word, tell him, and his horse must stay on the preceding space until his next turn. The player whose horse first crosses the finish line is the winner.

This game may also be played with initial sounds instead of words. In this case, the child calls a word that begins with the letter or blend in each space. The track may be made for four or six horses.

7. Packing Grandmother's Trunk

For initial sounds, any number of children can play.

Construct and color a small box to look like an old-fashioned trunk.

Print initial sounds on small pieces of oaktag. Put them in a pile in the center. The person who starts picks up an initial sound and says, "I packed my grandmother's trunk and I put in ...." (name something starting with the sound).

Each child takes a turn in the same manner. If he cannot think of a word in a given time, he misses his turn. As each child says the word, he puts the card into the trunk and a scorekeeper gives him a point.

Set a time for the packing to be finished. The child who has the most cards in the trunk when the time is up is the winner.

8. Indian Straw Game

This game can be adapted as a device for word recognition (using words), or for word analysis (using rhyming words).

Cut 4 oaktag cards about 3' by ½', and 20 cards 2" by 2". On each of the large cards print a word with a different ending, such as "will", "sing", "sound", and "grow". On the small cards print five words with the same ending as each of the words on the large cards, making 24 cards in all.

Four children can play the game. A large card is placed in front of each player. One player throws all the small cards in the air. The children examine the cards and take all the cards with words rhyming with theirs if they can pronounce the words. Words not pronounced are told, and they, together with the cards that landed face down, are thrown by the next player. This goes on until there are no more cards to throw. The player who gets his 5 cards first gets 5 points; second, 4 points; third, 3 points; and last, 1 point, and the game starts again. The player who gets 10 points first is the winner.

9. Matching Words or Phrases with Pictures

Paste small pictures of words on 9" by 12" oaktag. Print the words on narrow strips. Some words not pictures should be included. Have the child match the words to the pictures, placing the words underneath.

10. Game of Moving

Find or draw a picture of a moving truck. Move a wide slit across the top. Print names of household articles on pieces of oaktag about 2" by ½". The child puts into the moving van only those words he can pronounce. If more than one child plays this game, each child should use word cards of a different color. The child who has the most cards in the van at the end of the game is the winner.

11. What is It?

Cut cards 2" by 3" from oaktag. Write words of differnet categories on the cards, such as flowers, fruits, vegetables, colors, and animals. Make 5 of each classification.

Deal all the cards. The player on the right of the dealer lays down a card and says, "Yellow is a color." Each player in turn lays down a color card, if he has one, using the same procedure until all have had a opportunity to play. Then the next player to the right starts a new category. The first player to get rid of all his cards is the winner.

12. Cross Words

Make a diagram for the puzzle on square paper. Write simple definitions underneath.

13. Picture Dictionary

Have the children keep a dictionary of words they meet. Draw a picture and write the words underneath. Make the book so that pages can be added as vocabulary grows.

14. Fish

Purpose: Word recognition

Material: Duplicate cards in pairs with one word on each card made on oaktag.

can can head head cat cat

Procedure: The cards are dealt one card at a time, each player holding five cards. The remainder of the pack is placed in the center of the table, face down. The object of the game is to get as many pairs of cards as is possible. The winner is the one with the largest number of paired cards on the table in front of him at the end of the game when all the cards are matched. The player on the dealer's left starts by asking any child he wishes for a card that matches one of the cards which he holds in his hand. For example: He may hold the word "which", and he asks someone for the word "which." If the child asked has the word, he gives it to the first player. This player continues to ask for another card until he is unsuccessful. When the one asked does not have the card, he says "Fish", and the child takes the top card from the pack. The game continues in like manner to the next player, etc. This game may be played with two or more children.

15. Crazy Eights

Purpose: For practice on initial and final consonants, blends, and finding small words in larger words.
Material: A deck of 40 cards, (2" by 3"). Words containing parts to be emphasized should be printed clearly near the top of the cards. For example: if ing, er, ew, and ight are to be studied, print 10 cards with words containing ing, 10 with er, etc. Make 6 extra cards upon which the figure 8 has been printed.
Procedure: Two or more players. Object of the game is to get rid of the cards. Deal 4 cards to each player. Place the remainder of the pack in the center of the table. Player at left of dealer begins by placing any one of his cards face up on the table, reading it aloud. The next player must play a card from his hand containing the same word grouping. (For example: if

the first person plays night, the second person must play a card containing ight.) If the player does not have a card with the same word grouping and has an 8 card in his hand, he may play the Board and call for another group to be played. Naturally he will call for the group of which he has the most cards. If, on the other hand, he has no 8 card and cannot play a card from his hand, he may draw 3 times from the pack. If he fails to draw an 8 card or a word card he can play, he must lose his turn and the next player may continue. If a player does not read the card he plays, he must take the card back and lose his turn. If he reads it incorrectly, he must take it back, also.

16. Alphabet Game

Purpose: To improve initial sounds, initial blends, and spelling.
Materials: A number of small square cards on which are printed all the letters of the alphabet, one letter per card. Three or four of each of the vowels should be included. All the initial blends like gl, tr, etc. may be included.

Procedure: Two or more people may play. The cards are placed face down on the table. The players take turns selecting a card and naming a word which begins with that letter or blend. If they cannot name a word in a reasonably short time, they put the card back. When all the cards are picked up, each player tries to spell as many words as he can with the cards he has collected. The winner is the person who has the greatest number of cards and words combined. A score can be figured by counting one for each card collected and ten for each word spelled. Each card should be used only once in spelling a word.

17. Change Over

Purpose: Word Analysis. Drill on initial consonants and blends. Drill on endings.
Materials: Cards of oaktag 2" by 3" with words printed on them.

hat	shell	will	all	sing	sand	look
cat	well	spill	tall	ring	band	book
rat	fell	fill	wall	swing	land	brook
sat	tell	bill	ball	bring	hand	shook

Procedure: Deal out five cards. The child to the left of the dealer plays any card naming it. Next player either plays a card that rhymes or begins with the same letter. For example; If bill has been played, fill, rhyming with bill or band, beginning with the same letter could be played. If a child cannot play, he draws from the extra cards until he can play or has drawn three cards. If he has the card "change over," he may play that card and name a word that can be played upon. The first person out of cards wins the game.

18.. Freight Train

Purpose: Quick perception drill.
Material: Several large cardboard trains. Each car of the train should have two or more slits for the insertion of word cards.

Procedure: Each player has a train. The teacher shows a word, and if the player can read the word, he may place the card in his train. The player whose train is first completely filled with cards (freight) wins.

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6. Spelling

Spelling in the primary class should be commensurate with the written vocabulary used by the child at each level of his development. The child must learn to spell the words he is called upon to write.

Children should be reading at the primer level and writing before spelling is introduced.

The words chosen should be a minimal number of essential words reflecting the interests, social living experiences and social maturity levels of the children. We have chosen A Functional Basic Word List for Special Pupils, Stanwix House, Inc., Pittsburg 4, Pennsylvania.

Before formal spelling is begun children need the skills listed below:

Skills

Recognize the letters of the alphabet in random order, both lower and upper case.
Learn to spell simple words that are frequently encountered in reading and speaking.

Activities

Use commercially made liquid duplicator alphabet sheets for coloring
Use set of printed alphabet cards with accompanying picture cues
Learn to spell own name and many of the labels used in the classroom
Sets of word cards with matching pictures
Teacher-made flash cards of simple words

7. Writing

As in all other areas, instruction in writing must be geared to the abilities and developmental levels of retarded children. The basic pattern used in the letter formation should be developed before any attempt to write. To develop the necessary skills, definite and specific teaching is required.

Suggested ways to help a teacher with writing instruction:

a. Name Cards - - Name cards should be provided early in the year. Cut oaktag to make cards about 7 inches by 3 inches. Rule two lines on the card that are about 1½ inches apart. Between these lines write the child's first name in manuscript with a black crayon or a felt pen. Each child keeps his name card in his desk for referral when he wishes or needs to write his name. After name cards have been distributed, present each child's name on chalkboard.

b. Directions for Writing at Chalkboard

(1) Stand tall on both feet in front of the board, but not touching it.
(2) Use a half piece of chalk; hold it with the four fingers on top, and the thumb underneath. It will not be possible for some of the children to hold the chalk in this way. Individual adjustments will have to be made.
(3) Write with the end of chalk nearest thumb. Write at eye level.

c. Presentation of Name on Chalkboard -- Rule chalk lines that are 4 inches apart. Write the names of three or four children in one space, and ask them to find their names, then write their names on the next space with individual teacher help. First trace his name with forefinger--over name written by teacher--then trace with chalk as teacher guides hand. Then write name in provided space. There should be many days of this procedure with individual supervision at the chalk board before writing at desk with black crayon. With many children only one letter can be mastered or attempted at a time but the first name should be presented as a whole at the beginning with no mention of letter names. Each child should learn to recognize his name, then learn to write it. It is a momentuous accomplishment when he can say, "I can write my name!" It is a laborious task often due to poor coordination, defective vision, etc. Big writing should be encouraged as many children have a tendency to write small and cramped. Much patience, time, and praise must be given by the teacher. A few children may be unable to learn to write through conventional methods. These may need to learn through the kinesthetic approach.

d. Materials -- large black crayon, primary pencil, primary widespaced tablet, and newsprint. The tablet will be used for directed seatwork activities after the children have learned to write on lined paper with primary pencil. All sheets should be kept in tablet in order that progress may be observed. Children should not be permitted to draw or scribble in tablet. Standards of neatness should be discussed and established with children. It will be desirable to keep tablets on a shelf when not in use.

e. Directed Writing Lesson - - When the letter patterns have been carefully presented on chalkboard and the children are able to write simple words and phrases on the chalkboard, the directed writing lesson should be started. Each child should be given a sheet of unruled 9" x 12" newsprint and a large black crayon. Teacher should have a supply of large black crayons to be used only for writing. Direct children to fold newsprint in middle, fold again the same way, then fold again. Learning to fold newsprint will require several periods of instruction. Papers should then be opened and placed on desk. The length of the paper should parallel the length of the desk. The folded spaces serve as the first lines for writing. Children will write their names first. Then will follow a careful presentation of each letter pattern which has already been presented on board. This will necessitate many lessons. After all letters have been presented--mentioning the name of each letter--then create the need for the first writing of a word. Children may want to talk about their dogs. Write the word dog. Write the word on the board between lines about 4 inches apart. Write slowly while the children watch. Erase the word. Then the teacher will write the d while the children watch. They then should make the letter in the space on their paper. Follow this procedure with each letter. A descriptive count for each letter may be used, as "the d is a very round letter like a ball with a tall, straight back; the o is round like a penny; the g is a very round letter like a ball and a monkey tail." The teacher should examine the work of each child to correct wrong formations. The children should fold their papers so they cannot see the word they have written. The teacher should then repeat the writing of the word dog, writing each letter while the children watch her. Finish the lesson by having the children draw a picture of their dog or a dog on their paper. Papers may be displayed.

f. Correct Position When Writing at Desks -- Children should be taught in the beginning the correct position of the body, correct holding of the pencil, and the placement of the paper.

(1) Sit tall in seats with both feet flat on the floor.
(2) Paper placed straight in front of them on the desk. Held firmly with free hand. If a child is left-handed, the paper should be held with right hand.
(3) Pencil should be held between the thumb and the second finger with first finger resting on top of the pencil. Hand should rest on the side. The pencil should be held where the sharpening begins.

g. Margin -- The margin should be explained in the first writing lessons with pencil. Teacher should open a book and show children the space on the left that always precedes the writing. Have children to make margin one forefinger wide. Place a pencil dot on lines where finger comes.

h. Developing a Directed Writing Lesson with Ruled Paper -- After all letters, a few simple words and phrases, and children's names have been written on newsprint with crayon, the next step is writing on ruled paper with a primary pencil. Paper 9" x 12" with 3/4" ruling should be used. One sheet is enough for two or more lessons. Two spaces for tall letters and one space for short letters should be used. Then as skill and muscular coordination develop, one space may be used for tall letters and one-half space for short letters. The content of the lesson should have meaning for the children and often their suggestions and ideas used. The same procedure should be followed as outlined above. Proper position of body, paper, and pencil should always be stressed before writing begins. Writing lightly and relaxed should be emphasized as it will become a rather grim affair with some children in their driving desire to write. Some will grip their pencils and become very tense.

As children progress through the Special Primary Class, their ability to write smaller will develop. When this stage has been reached they will be using paper with 5/8" ruling. They will be writing longer sentences in experience stories and other stories. There will be other writing needs. The writing lesson should be presented according to the directions outlined. At the beginning of a school year review will always be necessary. The same letterby-letter plan of development should be used. There will be older children coming into the Special Class who have not had manuscript writing. It will be necessary to give them instruction with the beginning group.

i. Capital letters -- The Capital letters should be presented as there is need forsthem in writing sentences and names.

j. Writing Numbers -- Children should learn the correct formation of numbers. They should learn the difference between the printed number and the written number. The correct written form should be taught.

Skills (3 Levels)

Participate in activities to futher large-muscle development.
Engage in unrestricted scribble-drawing.
Become aware of the meaning of right and left.
Participate in activities to further small-muscle development.
Develop, through practice, the ability to adjust to size and form of materials
Participate in activities to further eye-hand co-ordination.
Relate printed symbols to words and meanings.
Trace his own name in manuscript and trace simple geometric forms.
Develop left-to-right progression movements.
Develop his ability to copy manuscript writing.
Acquire, through practice, the ability to write on a line.
Learn to use left-to-right and top-to-bottom progression in writing.
Become aware of simple capitalization, such as that in his own name and at the beginning of a sentence.
Begin to use capitalization, as in his own address, school name, day of week, month of year.
Become aware of the period and question mark.
Begin to use the standard heading at his school
Become aware of margins.

Activities to Develop Skills

Writing name on papers and other belongings
Writing labels and captions for pictures drawn by children
Writing labels and captions for picture diction
Writing gift tags
Writing greetings for special days
Writing short invitations to a party or program
Writing short thank you notes and friendly letters
Writing experience stories from blackboard or a chart
Filling in blanks in workbooks, number books, etc.
Writing a short poem from chalkboard
Writing notes to a sick child
Labeling pictures for display
Placing words in alphabetical order from list on board
Labeling pictures in scrapbook on a unit
Writing in proper sequence three or four short sentences of a story from chalkboard
List of duties in classroom
List of pupil's names
Signing notes to parents regarding affairs
Names of family members
Names of common tools of cleanliness

C. ARITHMETIC

There are various stages of learning in arithmetic. The retarded child needs experience with every stage in the development of basic concepts.

1. Object stage: It is usually called the concrete stage because real things are counted, enumerated, grouped, regrouped, added to, taken from, etc.

2. Picture stage: Pictures of things and people are used and handled as in the case with objects.

3. Semi-Concrete stage: Dots, stars, tally marks, dominoes, etc. are counted, grouped and regrouped.

4. Symbolic stage: It is usually called the abstract stage. This is the most difficult level and generally not much value to the retarded child unless it is related very carefully to the previous three stages.

Situations involving numbers and quantitative concepts are developing throughout the day. Many experiences arising out of classroom activities and home life will offer opportunities for informal arithmetic at the primary level. Arithmetic may be taught at these times as well as at specified time for the teaching of numbers.

As has been noted there will be children ready for varying levels of instruction. Listed below are the skills for levels 1, 2, and 3.

1. Counting

Skills

Ability to count by rote 1-20 (Repeating numbers in order without any clear idea as to the measuring of the numbers.)
Ability to rote count by 2's to 20
Ability to rote count by 5's to 100
Ability to rote count by 10's to 100

Activities to Develop Skills

Rhymes (Example: One-two, Tie my shoe, Three-four, Shut the door)
Number game
Number songs - Ten Little Indians
The Muffin Man
Tiddley Wink and Tiddley Wee
Stories involving numbers (The use of the flannel board will be meaningful at this time.) Three Bears
Three Billy Goats
The Elves and the Shoemaker
The Three Pigs
The abacus helps
Put sticks in groups of 2's, 5's, and 10's and put rubber band around them
Group checkers or dots
Children may stand in groups

Skills

Ability to do rational counting 1--20 (Rational counting is the process of associating the number names with corresponding number of objects.)

Activities to Develop Skills

Plan to have on hand many objects to be counted such as sticks, pencils, pennies, toys, books, blocks, nuts, etc. in making the transition from rote counting to rational counting.

Counting:
- The children present; boys, girls
- Doors, windows, desks, etc.
- Children in reading circle
- Chairs needed for reading circle
- Chairs at the table
- Scissors needed
- Children needed for a game
- Books on the table
- Toys, puzzles and other materials on the shelves

Have children choose a specific number from a larger number of objects:
- Bring seven pairs of scissors.
- Place four green blocks on the table.
- Bring me three books from the shelf.
- Count ten pennies.
- Count two nickels.
- Count one dime.

Skills

Ability to do serial counting 1 - 10 (Serial counting applies to the counting of sensations received as distinguished from counting objects. The three main types are: (1) visual - objects seen in succession, as passing cars, (2) auditory - a series of sounds, as claps of the hands, (3) muscular - touch, as taps on the shoulder.)

Activities to Develop Skills

Visual:
- By whispering the teacher asks the child to raise his arm or nod his head a certain number of times.
- A child may hop or skip a certain number of times while other children observe.
- Bouncing or tossing ball.
- Counting the number of children jumping rope or going by the door.
- Counting the number of bean bags or blocks tossed into a basket or box.

Auditory:
- Teacher asks children to count number of taps made by pencil or ruler.
- Count number of times a rhythm triangle is struck.
- Count number of times a whistle is blown or bell is tapped, etc.

Muscular:
- A child taps the hand of another child whose eyes are closed. The child tells how many times he was tapped.
- A child closes his eyes, nods his head a certain number of times, and tells how many times he did so; the other children observe and check accuracy.
- A child closes his eyes and touches the chalkboard a number of times while the other children observe, then states the number of times he touched the board.

2. Number Concepts

Skills

Develop an awareness of the many uses of numbers in daily living.
Develop a simple mathematics vocabulary.

Activities to Develop Skills

Through the sharing of the stories from home, be alert to situations involving number concepts and vocabulary; in the classroom, on the playground.

Skills

Develop an awareness of the possibility of various sized groupings through the use of concrete materials.

Activities to Develop Skills

Two to a pair - mittens, shoes, etc.
Four wheels - cars, wagons, trucks, etc.
Flannel board with various groupings
Blocks, pegs and pegboards
Perception cards with groupings

Skills

Become aware of numerical relationships between simple objects, e.g. one shoe for one foot.

Activities to Develop Skills

Putting on galoshes, mittens, coats for outdoor play, going home, etc.
A chair, a book, paper, pencil, scissors, etc. - one for one

Skills

Recognize the relationship of numbers in sequence.

Activities to Develop Skills

Writing numbers 1 - 20
Draw certain number of simple objects and write the number

Skills

Develop understanding of the numbers 1 through 10.

Activities to Develop Skills

Through rote, rational and serial counting
Through everyday activities in the classroom

Skills

Develop the ability to use the ordinals first through fifth in meaningful situations.

Activities to Develop Skills

Taking turns in games
Passing to restroom or cafeteria
Through giving directions (Example: Fourth row may go first.)

Skills

Develop an awareness as a "putting together" process through play and functional use.
Develop an awareness of subtraction as a "taking apart" process through play and functional use.

Activities to Develop Skills

Use concrete objects like blocks, sticks, money, etc.

Skills

Begin development of ½ as one of two equal parts.
Develop an awareness of ½ and ¼.

Activities to Develop Skills

Divide apples, cookies, candy bars, gum, sheet of paper into halves or fourths in classroom situations.

SKILLS

Forms - square, triangle, circle, ring, box

Activities to Develop Skills

Use of felt cut-outs on flannel board and drawing on chalkboard
Finding squares, circles, triangles in beads, blocks, or building sets
Drawing a ring or a box around certain items on chalkboard
Forming circles for games
Using a square box in play activities
Use of triangle in music

Skills

Position and location
- up and down
- Front - back
- top - bottom
- above - below
- over - under
- outside - inside
- right - left
- beside - middle

Activities to Develop Skills

Use of musical records
Dances
Directions:
- Stand up.
- Hold up your left hand
- Stand beside John, etc.
- Put your hand over your head.
- Put the book on the shelf under the window.
- Come to the-front of the room

Skills

Distance and space

- a short way
- Near - far
- more room
- enough room
- a long way
- a block away
- not enough room

Activities to Develop Skills

Comparing distances in the classroom, school building, playground
On field trips to the store, bakery, etc.
Walk in the neighborhood - Example:
  Do we have enough space to play bean bag?
  Is the cafeteria far from our room?
  Is the bakery a long way from school?

Skills

Develop gradually the concepts of size, quantity and location

- Relative size:
  - long - longer
  - wide - wider
  - big - bigger
  - Tall - taller
  - large - larger
  - short - shorter
  - narrow - narrower
  - small - smaller
  - more - some
  - light - heavy
- Relative quantity:
  - as much as
  - as many as
  - more - less
  - many - fewer
  - not as many as
  - more than
  - less than
  - enough for each
  - fewer than
  - the same as

Activities to Develop Skills

Measuring and comparing in the classroom or on the playground-Example:
  Is this ball as large as that ball?
  Is Jane smaller than Barbara?

Skills

Measurement
Concepts of: hour, day, week

- Vocabulary:
  - late
  - early
  - today
  - on time
  - yesterday
  - afternoon
  - morning
  - tardy
  - tomorrow
  - evening
  - night

Activities to Develop Skills

Discuss often:
  time school begins
  time for recess
  time for lunch
Use sentences pertaining to activities for today and tomorrow
Write short experience charts using the vocabulary pertaining to time
Make a calendar

Activities to Develop Skills (Continued)

Count the days in the month; count the Mondays, Sundays, etc.
Make paper clocks so each child can have his own - later have children make their own
Explain the "big" hand and the "little" hand -- where is the little hand when we go home, lunch, etc.

Skills

Concept of liquid and linear measure

Activities to Develop Skills

Provide experiences to develop the ability to understand the use of the cup, pint, quart by serving cool-aid in cups made in quart and pint containers.
Label cup, pint and quart containers and let children experiment by measuring water.
Introduce rulers - foot and yard - and by using them, children may find out "how tall," "how long," "how wide," or "how high" a thing is.
Measure children to see "how much taller" or "whose rope is longer."

Skills

Weight:
Develop use of scales
Introduce term pound

Activities to Develop Skills

Weighing children for the health record
Let children weigh each other
Trips to the grocery store to see grocer weigh meat, oranges, apples,etc.

Skills

Concept of dozen and half-dozen should be introduced since primary children engage in activities necessitating an understanding of the terms.

Activities to Develop Skills

Playing store where eggs, bakery goods, etc. is an interesting activity for developing this concept
Dying Easter Eggs
Using egg cartons

Skills

Concept of temperature is necessary and fits in well with arithmetic as well as science vocabulary-- cold-hot, warm-cool.

Activities to Develop Skills

Make weather charts (marking cold days gray and warm days yellow).
Ice is cold.
Water is cool, etc.
Boiling water is hot.

Skills

Value of money - penny, nickel, dime, quarter
(Use real coins. Do not use play money in teaching coins and their value. Let children learn that a nickel will buy more than a penny; that a nickel is worth five pennies; that a dime is worth two nickels; that a quarter will buy more than a nickel or a dime; that a quarter is worth 5 nickels or 25 pennies.)

Activities to Develop Skills

Playing store (use penny erasers, 5 cent pencils, 25 cent spelling pad)
Shopping for class parties
Use milk break time for instruction in this area as well as cup, pint, etc.
Use of money in the school cafeteria

D. ARTS AND CRAFTS

In the education of the mentally retarded the art program should be an integral part of the curriculum. To make it most useful and most valuable, it must be a part of the children's other school and living experiences.

Charles D. Gaitskill has this to say about teaching methods:

> "It appears that the approved teaching methods in art used with normal children are practical and effective when applied to slow learners. The usual pedagogical procedure found for normal children, including motivation, guidance, classroom arrangements, display and appraisal of the effectiveness of the program in progress vary in no marked respect from those which may be recommended for children of retarded mental development." /5/

The section in this guide developed for the orthopedically handicapped is applicable to use for mentally retarded children and can be adapted to all levels. (Page 44 - 49)

E. MUSIC

Music is a medium that contributes considerably to the education of mentally retarded children.

1. Music presents to children an acceptable means of emotional release.

2. Rhythmic activities, singing, playing simple instruments and listening offer opportunities to the educable mentally retarded child to grow both in personal worth and social acceptance.

3. Through musical activities there are numerous opportunities to integrate the children in the special class into the total school population.

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[5] Gaitskill, Charles D., "Art Education for Slow Learners," School Arts, February, 1954, p. 5.

4. Skills developed in learning a new song contributes to both the child's growth in auditory discrimination and in language development.

5. In the areas of social growth musical activities contribute to the learning of rules and modes of behavior.

The music teacher visits the classes for the mentally retarded in the elementary schools.

Music can be correlated with all areas of instruction. The skills and activities listed below can be used in all units developed and can be related to all instructional areas.

1. Listening (Primary and Intermediate)

Skills

The teacher helps the child grow in listening ability. First "learn to listen" and then "listen to learn."
Become aware of sounds around him.
Become aware of contrasts in sound (high--low , loud--soft, fast--slow, up--down).
Listen to, recognize, and reproduce familiar sounds.
Recognize simple phrases and songs.
Listen for enjoyment to music and stories of music.
Develop recognition of contrasts in sound and repeated notes.
Begin to build a listening repertoire (nursery rhymes, folk tales, and simple melodic compositions).
Begin to recognize and identify the sounds of rhythm band instruments.
Develop his ability to recognize such tonal relationships as repeated notes, skips, step-wise progressions.
Discover that melodic line tells a story.
Expand his listening repertoire.
Develop his ability to identify such commonly known instruments as the piano and violin.
Begin to generally distinguish between wind, string, and percussion instruments.
Begin to recognize the difference between adult male and female voices.
Extend his ability to recognize tonal relationships, phrases, melodic patterns, rhythmic patterns, songs.
Continue to develop and extend his listening repertoire.
Extend the length of time he can enjoy listening to music.
Continue to develop his ability to recognize tonal relationships.
Continue good listening habits while extending the length of time he listens to musical selections.

Activities to Develop Skills

Listen to nature--birds and animals
Sounds on the busy street
Sounds in the halls, classroom, etc.
Listen to radio program of good music
Listen for various tempos and moods in music
Listen to songs sung by the teachers and other students
Listen to records for enjoyment - Example: Bozo Series, "Alice in Wonderland," "Cinderella," etc.
Listening to music on T.V.

Activities to Develop Skills (Continued)

Listen to radio and T.V. programs designed to offer "good" music
Films
Record players--stories, songs, instruments
Listen for simple melody in familiar records
Listen to records relative to birthdays and holiday music
Listen to records for appreciation, enjoyment, information and/or to learn new songs, games or dances
Listen to variation in music, i.e. high, low, slow, fast, loud or soft
Listen to school programs
Tape recorder--own voice
Visiting symphony concerts

2. Singing Experiences (Primary and Intermediate)

Skills

-
Discover the sound of his own singing voice.
Recognize that there are similarities and differences in musical tones.
Recognize and sing easy rote songs.
Participate in singing activities with the class and as an individual.
Acquire the ability to sing loudly or softly.
Begin to develop his ability to sing in tune.
Practice correct habits in singing.
Continue to learn rote songs.
Begin to use his hands to indicate up-and-down melodic direction.
Become aware of dynamics (loud-soft, fast--slow) and interpretation (musical phrases).
Continue to perform in an audience situation.
Practice good singing habits.
Begin to sing simple rounds and canons.
Become aware of customs, people, and heritage through songs.
Become aware of a musical score through seeing it.
Practice good habits in singing.
Strive for an acceptable tonequality.
Continue to increase his repertoire of songs, including rounds and canons.
Begin to sing simple descants (when and where practical).
Gain consciousness of people, customs, and heritage through songs.
Recognize that the relative position of the notes on the staff indicates melodic direction.
Participate in assembly programs.

Activities to Develop Skills

Singing, chanting, humming, familiar sounds (rain, wind, cars, train)
Units of work:
  Safety
  Health
  Numbers
  Seasons
  Holidays
  Drama
Singing of nursery rhymes

Activities to Develop Skills (Continued)

Finger plays
Singing games
Singing rounds
Familiar tunes heard on the radio or T.V.
Songs for assembly programs
Participating in musical programs
Singing of patriotic, popular and all familiar songs

3. Rhythmic Experiences and Playing Experiences (Primary and Intermediate)

Skills

Recognize fundamental rhythmic movements (walking, running, hopping, swaying, and others).
Develop his ability to perform or respond to simple rhythms with head, feet, and body.
Discover movement of music through rhythmic activities.
Develop his rhythmic understanding through body response.
Discover accent in movement.
Develop his recognition of tones of varying length.
Associate basic rhythmic activities with appropriate music.
Continue to develop his rhythmic understanding through body response.
Develop his ability to feel regular phrasing.
Begin to feel duple and triple meters (2/4, 3/4, 4/4, 6/8).
Increase his ability to reproduce rhythmic patterns.
Increase his ability to reproduce rhythmic patterns in various meters.
Express simple rhythmic patterns through body response, vocal response, written response.
Increase his ability to express simple rhythmic patterns in many ways.
Increase rhythm experiences in singing, playing, dancing.
Become familiar with simple rhythm instruments.
Have free-play activity with resonator or melody bells.
Practice using simple rhythm instruments.
Become aware of simple tempo concepts in his playing (fast--slow, and others).
Develop his ability to play two- or three-note tonal patterns.
Continue practice with rhythm instruments.
Begin to recognize such other melody instruments as the tonette and song flute.
Extend his ability to play tonal patterns.
Increase his ability to play both rhythm and melody instruments.
Become aware of simple musical score.
Extend his ability to play rhythm and melody instruments.
Develop his ability to read a simple musical score.

Activities to Develop Skills

Use of records to encourage motor responses such as skipping, galloping, falling, clapping, tapping, hopping, leaping, walking, running, turning,
Exercises to music such as stretching, bending , whirling, swaying, and swinging
Expressinn of feelings, interpretations and beautiful graceful movements by using aids such as scarves, stick horses, streamers, see-saws, balls, jumping ropes
Use of action songs and singing games
Use of rhythmic dramatization and pantomine

Activities to Develop Skills (Continued)

Clapping music rhythm and phrasing with hands
Learning folk dances and square dances
Choral reading and reciting the words to songs

4. Creative Experiences (Primary and Intermediate)

Skills

Experiment with familiar sounds (clock, train, siren, and others) using voice and body
Become aware that musical sounds surround us.
Create simple tonal patterns.
Interpret music through physical responses.
Feel encouraged to create simpleverses and tunes.
Continue to create dances, rhythms, songs.
Begin to dramatize classroom singing or playing and/or recorded music.
Dramatize classroom singing or playing and/or recorded music.
Express his musical feelings through listening to music as he paints or draws.
Express himself through composing simple original songs.
Begin to create simple accompaniments for rhythms or rhythm instruments, melody instruments, and/or auto-harp.

Activities to Develop Skills

Develop chants and songs to be used in sports and games.
Listening to records and recordings and interpreting moods, emotions, and feelings.
Create dance patterns.
Construct and use instruments.
(Shakers and rattles made from salt boxes, shells, bottle caps and salt shakers)
Use of rhythm band instruments.
Create sound by using materials at hand--wood, steel, skin, bottles.
Create music and sound effects for original plays and puppet shows.
Create actions to use with songs.
Develop finger plays to use with poems.
Use of instruments--depending upon the ability, experience, and needs of the child.

II. INTERMEDIATE LEVEL

At this level the pupils usually have an age-range 10 to 13 with mental ages ranging from 6 to 10. The curriculum must be planned to stress the basic tool subjects of reading, writing, arithmetic, and social and emotional adjustment in a classroom that is the "workshop home" for these children. Children work best in a friendly atmosphere. Pleasant surroundings are morale builders and stimulate learning. A teacher can promote a relaxed, friendly classroom program by:

1. Greeting children warmly when they enter the room.
2. Letting children know you are their friend by your eyes, voice, words, and frequent smiles.
3. Taking time to praise, to show kindness, and to listen.
4. Recognizing each child as an individual, providing many levels of work so that each child can experience success each day.
5. Giving each child something to call his own--a desk, crayons, books, etc.
6. Checking each day (the first week) to see that each child knows the way home or bus number.
7. Supplying tags as children enter room--calling a child by his name makes him more comfortable.
8. Following routine, setting up a program for collecting lunch money, keeping attendance records, opening exercise, beginning class work, having show and tell time--a good routine sometimes saves time and encourages good working habits--plan daily activities with students, writing plans to be followed on the board.
9. Making assignments clear, letting students ask questions, providing work time, checking work with students.
10. Providing a generous amount of time for students to move around the room or relax--periods of hard concentration should be short--over-fatigue should be avoided.
11. Allowing each child a chance to share and to be part of the group by being a monitor or doing a room job (change often).
12. Avoiding the use of don't--make positive rules and suggestions.
13. Evaluating the day's work by discussing what each child liked to do best, how he had fun, what he learned, or what he would like to do again.
14. Giving students something to look forward to by planning for tomorrow (not in detail) suggesting activities such as, perhaps tomorrow we will see a film--would you like to see a film tomorrow--tomorrow when you come to school we will read a new book.

A. Language Arts

(Please refer to the Primary Section, page 22, as an introduction to formal learning to strengthen the Language Arts Program. Many of the skills and activities prepared for the Primary Section of our guide apply to the Intermediate Section.)

1. Listening

"Although listening is the first of the language arts areas which the child uses as he learns to understand the world, it still remains a nebulous part of most school curriculums."[1]

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[1] The Elementary School Journal, January, 1957, page 181.

Good listening is important for efficient learning for the retarded child as well as the more intelligent student. Many failures can be traced to "half listening". Good listening habits can be developed and poor habits improved through training. Children need to realize the need for listening, such as--to understand, to enjoy sound, and to detect danger.

Listening skills cannot be taught altogether as part of the reading program. Students need practice in listening for different sounds, expressions, instructions, messages, and to visualize situations and incidents.

Often, we as teachers, encourage half listening by repeating instructions. If it is necessary to give instructions a second time, it is wise to have a student repeat.

The student and teacher, through class discussion, group activities, or individual study, can develop a standard for listening such as:

1. Be courteous, do not interrupt others
2. Pay attention to what the speaker is saying
3. Sit quietly, wait for your turn
4. Speak softly and clearly
5. Do not disturb others by making unnecessary noise
6. Teacher can hear only one student at a time--encourage children to remember this

Listening and speaking activities should be taught together. It is hoped that each teacher can build upon the suggestions and interweave the activities to include both phases of communication as one activity.

Skills and Activities

a. Listening to stories told or read by the teacher--Children's classic literature should be a part of the heritage of the slow learner, too.
    1) Draw pictures to show favorite part of story.
    2) Select students to draw stick pictures on chalkboard to show sequence of story.
    3) Dramatize story by acting or with aid of puppets.
    4) Develop pictures using flannel board.

b. Sharing with classmates
    1) Show and tell--students bring something to school to tell about experiences they wish to share with the class.
    2) Stories or poems used by students visualize pictures.

c. Reports
    Give reports--newspaper articles, committee reports such as Junior Red Cross, Junior Safety Police, and favorite stories.

d. Assemblies
    Sitting quietly, watching, and listening in assemblies--doing our part when called upon.

e. Film and Television programs
    Students should be stimulated with discussion before the film or program begins.
    1) Listen for information, new facts, with questions later.
    2) Respond by keeping rhythm, humming the melody.
    3) Dramatize or dance to rhythm.

Classical music should be used with these children to develop an appreciation of the better things in life.

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g. Plans for the day
   Share the planning period with other students, listen to their ideas and suggestions.
h. Listening to and following directions
   Beginning with simple ideas and progress to more involved. Students should feel free to ask questions if an assignment is not understood. Instructions should be clear, to the point, and each step understood.
i. Listen for rules in playing games during recreation period
j. Relay messages
   Carefully give messages to other teachers, student secretary, parents, and others with whom we work.
k. Listen carefully to telephone conversations, must use sense of hearing entirely since they cannot see the other person--use of tin can telephone helps to encourage listening.
l. Identify sounds and voices
   1) Many environmental sounds can be used, children tell what they hear such as cough, sneeze, whisper, knock, door bell, fire engine, horn, whistle, toys, scratching, pin dropping, leaking faucet, warning signals, trains, fire and security drill bells, footsteps, scraping, breathing and heart beat.
   2) Use tape recorder or records to record and play back student voices, bird calls, animal noises, muscial instruments, and programs.
   3) Play games of "Guess Who". Children cover eyes, teacher appoints a child to speak a nursery rhyme or sentence--students raise hands to guess who--the one with the correct answer is the speaker.
   4) Fall sounds -- Listen to the weather talk, for example, the clap of thunder (giants throwing rocks), the crash of lightning (paper tearing)
   6) Playground sounds

2. Speaking

More than the teaching of correct English is involved when helping the slow learning child to speak correctly and enumciate clearly. Many of his special needs revolve around the fear of speaking up, the inability to speak clearly, the lack of a speaking vocabulary and shyness.

Speaking

More than the teaching of correct English is involved when helping the slow learning child to speak correctly and enunciate clearly. Many of his special needs revolve around the fear of speaking up, the inability to speak clearly, the lack of a speaking vocabulary and shyness.

Speaking activities are integrated with all phases of learning, attitudes, and social skills. Good human relations must be included as a part of the total language program. A child must feel he belongs before he is willing to share in conversation or group participation. A child will often forget himself when accepted as a part of the group and attention is focused on what is being said instead of how it is being said. "In situations calling for conversations, the teacher must learn to wait for the child's idea and accept each experience for what it means to the child."[2]

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[2] Ingram, Christine P., Education of the Slow learning Children, Second Edition. New York: Ronald Press, p. 274.

Skills and Activities

a. Group conversation and activities
    1) Contribute suggestions for daily plans
    2) Talk with others in kind voices
    3) Share with class during "show and tell"
    4) Express unhappiness vocally instead of fighting or retreating
    5) Answer questions directly, ask questions about topic of discussion

b. Tell stories and events in sequence
    1) Relate happenings of story read, use flannel board, pictures, and chalk talks
    2) Relate activities of the day (use as part of the daily evaluation)
    3) Recall activities of trips and excursions
    4) Give directions for locating places
    5) Relate activities from film and television

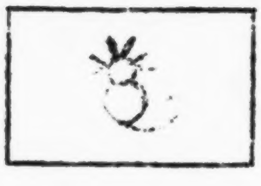
c. Assume role of leadership
    1) Make announcements
    2) Tell riddles or jokes
    3) News reports from daily paper
    4) Class reports--Junior Red Cross, safety meeting
    5) Monitor, library of flowers
    6) News about my family
    7) News about my friends
    8) News about things I own
    9) My pets
    10) Things I do outside of school
    11) My books and pictures
    12) My hobbies
    13) My travels

d. Tell stories of experiences which child has had (happiest time, most fun, sad times, busy time, etc.
    1) Write or tell stories seen in a picture
    2) Real or make believe--Children often tell exaggerated tales--Before or after story let them tell if it is "for real" or "make believe"--Gives reasons for answers

e. Use of the telephone
    1) Learn to dial and learn own number. Use two play phones for two way conversation.
    2) Know good phone manners, time spent in conversation, tone for voices, answer promptly.
    3) Class telephone book

f. Introduce guests--correct way to make introductions
    1) Child responsible for introduction of parents at open house
    2) Classroom host or hostess to answer door, relay messages
    3) Acquaint new pupil with school facilities, cafeteria, principal, secretary, and other teachers

g. Use complete sentence, express ideas so they are understood
    1) Encourage relating complete thoughts in all speaking--use picture cards, children give a complete thought in response



A cat says meow.

    2) Encourage expression in speech--game, "I feel sad, happy, thankful, young, old, tired, hungry, sorry." Children respond with facial expression and sound.

h. Participate in dramatization
1) Appear before group in plays, chorus. For shy group use the aid of **puppets** and shadow plays.
2) Dramatize stories and poems
a) Game, "What am I doing," as student dramatize an activity, class guesses what he is doing
b) Game of lemonade

3. Reading

In a special class reading is a skill which must be emplasized. Learning to read is a much slower and more difficult process for mentally retarded children then for normal children. If the program of instruction is suited to their needs, these children will learn to read up to their mental capacities.

The aims in a reading program for the mentally retarded are much the same as for the average child. Some of them are as follows:

a. To help the child build an adequate sight vocabulary
b. To develop interpretation consciousness
1) Reading to find information
2) Interpreting directions
3) Following directions
c. To develop skills in word recognition
d. To develop dictionary skills
e. To familiarize the child with types of reading materials he will use in later life
1) Newspaper
a) To scan itelligently
b) To understand the news of the day
c) To enjoy comics
d) To follow sporting events
e) To find radio and television programs
f) To look for advertisements of different kinds
g) To look for entertainment schedules
h) To read the weather report
2) Magazines
a) For enjoyment
b) For homemaking
c) For mechanics
d) For crafts
e) For hints on personal grooming
3) Occupational
a) To find out employment blanks
b) To find out social security blanks
c) To find out license, registration and insurance papers
d) To follow directional signs
e) To interpret simple work sheets
f) To observe safety signs
4) Community
a) To recognize street signs
b) To observe traffic rules
c) To observe safety signs
d) To read programs, menus, etc.
e) To use telephone book, street and city directory
f) To use transportation facilities

g) To read schedules, road maps, time tables
h) To read names of products
i) To know where products can be purchased

These basic principles must be understood in teaching reading to the mentally retarded:

a. The mentally retarded child needs to find success in reading.
b. Since the rate of learning of a mentally retarded child is slow, the program should provide for prolonging the reading stage at each period of development. It is important for the teacher to sense the feeling of each pupil toward reading activity and to quickly discover the level at which he can function successfully.

The following methods can be used in determining a child's reading level:

1) Informal reading inventory - Let a pupil read orally from several reading levels. Start working below his frustration level.
2) Wide range achievement tests and reading inventories commercially prepared - Boter Reading Inventory, Detroit Test of Learning Aptitude, etc.
3) Observation of child's reading habits
4) Checking basic vocabulary tests at the end of readers
5) Check of visual comprehension left-to-right sequence

c. It is necessary to provide the mentally retarded children with the type of reading experiences they will actually use.
d. Instruction periods should be brief. It is necessary to provide reading material with a low vocabulary load and a high interest level. Motivation is a very important factor in teaching reading.

Pupils in the intermediate classes may have been exposed to all the basal readers used in your schools and definitely not interested in reading about "Dick and Jane." There are now available looks of high interest level and low vocabulary content that should be used with the intermediate pupils.

The following publishers have many series:

Harr-Wagner
Follett
Lyons and Carnahan
L. W. Singer
Stanwix House
Fearon Publishers
S. R. A. Reading Laboratories
Webster (Division of McGraw-Hill)
Dr. Seuss Books
Melmont
Benefic Press

A teacher must be capable of constucting chart stories and short stories on subjects which are of interest to the child.

This "experience" reading developing from a child's esperiences should be started at the Primary level and continued throughout all the grades.

The reading skills should be taught as fast as these children can learn. As the skills are learned, silent reading can be introduced.

Learning some methods of attacking new words is important in order to develop independence in reading . Both context clue and word analysis are reading skills which need to be learned.

Phonetic skill is also important and should begin on a hearing basis and develop as the learning progresses. Consistent, well planned drill in this skill is very helpful.

A good phonetic program should include recognizing:

a. The consonant sounds
b. The short and long vowel sounds
c. The beginning and ending consonants
d. The beginning and ending blends
e. Rhyming words
f. New words made by changing one or more letters of a known word.

Reading stories and children's classics to mentally retarded children has a very special value. Many of these children enjoy and understand and get special pleasure and a sense of security from being able to discuss these classics and stories with other children.

Topics or units of work will provide opportunity for the development of the important learnings necessary for the mastery of the skills and should be utilized. Topics should be selected to suit the level of learning along with the special interests, needs and problems of the children.

The reading program for these children should include learning the following:
a. To recognize their names
b. To recognize the names of their immediate families
c. To recognize the name of the school
d. To recognize the names of familiar objects in school room
e. To recognize the names of familiar household objects
f. To recognize the names of streets in their immediate neighborhood
g. To recognize the names of the stores in their immediate neighborhood
h. To read the days of the week and the months of the year
i. To read the signs on buses
j. To read the colors
k. To read the number words they will use
l. To read the safety signs (stop,go, crosswalk)
m. To read "ads" for simple shopping (dozen, quart, pint, can,etc.)

A few specific activities related to reading might include the following:

Activities

a. Chart stories
b. Picture stories
c. Original stories written by the children
d. Using spelling words in sentences
e. Use of dictionary
f. Solving simple riddles

g. Crossword puzzles
h. Classifying word lists
    1) Color
    2) People
    3) Toys
    4) Things we hear, feel, smell, see

i. Deciding whether paired words are the same or different
    1) Good - bad
    2) Tall - high
    3) Slow - fast
j. Flash cards
    1) Teacher made
    2) Commercial
k. Matching pictures and sentences
l. Pilgrim chart - building sentences
m. Reading workbooks
   Workbooks may have a definite purpose for the slow-learner. They help to supply reading drill and expansion of comprehension. They must be used as a teaching and learning aid--not as busy work.
n. List all the words you know which begin with the same letter
o. Encourage children to keep a library book record of the books they read listing only title, auther, and date completed
p. Simple indexing and use of table of contents should be taught
q. Reading story for particular purpose
    1) Information
    2) Re-telling
    3) Dramatization
    4) Amusement
r. Booklets of favorite experiences
s. Cutting and identifying pictures from magazines
t. Story dramatizations
    1) Puppets
    2) Murals
    3) Clay modeling
    4) Child participation
    5) Diorama
u. Word list for own use
    1) Card file
    2) Oaktag list
v. Listing words in alphabetical order
w. Daily newspaper

4. Spelling

The needs of the mentally handicapped children in spelling are identical with the needs of the normal children. He must learn to spell the words he is commonly called upon to write. Spelling vocabulary, therefore, should be commensurate with the written vocabulary used by the child at each level of his development. The spelling vocabulary should be drawn from two distinct areas:basic words and occupational terms.

Certain basic principles must be regarded in teaching spelling to mentally retarded children.

a. Spelling should be thought of as a necessary aid to written English.
b. Spelling should not be taught until the child has had some experience in reading.
c. Mentally retarded children have difficulty in applying and remembering rules.
d. A systematic method of teaching spelling should be used.

e. Accurate pronounciation is essential in learning to spell.
f. Spelling, reading, and writing should be closely integrated so that the learning takes place in all areas.
g. A combination of methods and techniques should be used.
    1) Visual
        a) A child sees the word (in reading stories, on labels, chalkboards, charts, and other places.
    2) Memory
        a) Word is pronounced and written on board.
        b) Each letter named.
        c) Word is used in sentence.
        d) Word is erased.
        e) Child tries to write from memory when each child is secure and confident of word.
        f) Word is again written on board and children compare.
        g) Each step may be repeated for better memory.

    3) Kinesthetic
        a) Word is written on board and then pronounced.
        b) Child may trace over word with another color of crayon or use finger.
        c) Identify each letter as he traces and says the word.
        d) Continue this procedure until he can write it.
        e) Children can also use "word builders". Each child may have a box of these letters and build the word.
        f) Children may use flannel boards for building the words.
h. Choice of words
    1) Select words used by child at his own level of development.
    2) Include in the spelling vocabulary words which he will use later in life.
    3) Use simple basic lists - Gates, Dolch, Functional Basic Word List, and other Primary Reading Word Lists.
    4) Learn to spell own name and address.
    5) Use words within child's own experience.
    6) Use words needed in writing letters, notes, messages and addresses
    7) Use words needed to make simple shopping lists.
    8) Use words in connection with units of work.
i. Suggested activities and teaching aids
    1) Picture dictionaries - magazine pictures.
    2) Duplicate each letter of the alphabet on individual sheets which may also be illustrated. This may also be made in booklet form.
    3) Spelling words may be kept in alphabetical order in booklet form.
    4) Teacher may also keep lists used in some form which children can refer to at anytime.
    5) Games such as spell-down-baseball.
    6) Workbooks provide various activities.
    7) Cards with words and pictures for matching.
    8) Flash cards.
    9) Work sheets - teacher made are most effective.
    10) Boxes of words and letters for constructing words.
    11) Alphabet sheets, (commercial for liquid duplicator).

5. Handwriting

Handwriting requires the coordination of small muscles of the hand and eye. All children do not reach the maturation level for handwriting at the same time. A child needs a maturation level for writing that is about the same for reading. Cursive writing should be taught at this level. Research has shown there is more carry over to retention of words because of the kinesthetic involvement in cursive writing.

Speed of writing should not be emphasized, but emphasis should be placed on accuracy and legibility. Writing should be closely correlated with language and spelling in order to give meaning to writing.

There should be no attempt to change the left-handed child to the right hand, where there is a definite preference shown and special adjustments with paper, desks and other tools should be made for left-handed pupils.

Suggested Activities and Teaching Aids

a. Present each child's name.
    1) Name Cards - write each child's name on lined tag board about seven inches by two and one half inches. These cards may be kept by child for referral.
    2) On chalk board - have child find his name. Teacher may write it, taking pains to present each letter separately.
    3) On large bulletin board, cut large figures (boys and girls) - put names of each child on cards under the figures. Have child find his name and figure. He may color the figure to make the figure look like the clothes he is wearing that day.
b. Directed writing lesson
    1) Give directions for writing such as seating position, how to hold pencil, position on paper, etc.
    2) Letter patterns should be presented on chalk board. Children may then make the letter on paper as directed. In the beginning it is good to use unruled paper (newsprint) and a large crayon.
    3) Presenting each letter and naming the letters will necessitate many lessons. After this, a need for writing words will follow name of child, name of pets, etc.
c. Capital letters - present them as need arises. Color is appealing, on special occasions have them color the capital H in Halloween, C in Christmas, etc.
d. Numbers - the correct formation of numbers should be presented the same as letters. Both the number and number name should be learned.
e. Writing experiences created by teacher.
    1) Writing names on belongings, books, etc.
    2) Writing labels and captions for pictures drawn by children.
    3) Writing labels and captions for picture diction.
    4) Writing gift tags.
    5) Writing greetings for special days.
    6) Writing short invitations to a party or program.
    7) Writing short thank you notes and friendly letters.
    8) Writing experience stories from chalkboard or a chart.
    9) Filling in blanks in workbooks, number book, etc.
    10) Writing a short poem from chalkboard.
    11) Writing notes to a sick friend.
    12) Labeling pictures for display.
    13) Placing words in alphabetical order from list on board.
    14) Labeling pictures in scrapbook on a unit.
    15) Writing in proper sequence three or four short sentences of a story from chalkboard.
f. Supplies needed
    1) A set of cursive alphabet cards for display in the room.
    2) Music liner for lining the chalkboard.

3) Large crayons.
4) Large primary pencils.
5) Unruled paper (newsprint).

B. Number Experiences

Arithmetic for the mentally retarded child must have real meaning in daily situations such as counting, telling time, reading and writing numbers, using money, weighing, measuring, and computing.

1. Developing Concepts
The development of concepts have a definite relationship to number thinking. Concepts should be developed in relationship to concrete objects. Abstract thinking cannot develop until a child is familiar with ideas and relationships in concrete situations.

Concepts to be developed and suggested activities for developing them:

a. Size
    1) Concrete experiences may be provided in the form of games such as:
        Which is the small one?
        Which is the smaller?
        Which is the smallest?
        Stand between the tall boy and the short boy.
    2) Work sheets provided with oral directions such as:
        Find the tallest tree.

        Put an X on the top of the paper.

        Put a circle around the biggest apple.

        Draw a square, put a circle in it.

    3) Make a card file or dictionary with words and illustrations of terms and concepts.
    4) Make an envelope file with pictures and cards showing different relationships, child puts words in order.

____________ ____________ ____________ ____________

____________ ____________ ____________ ____________

b. Telling Time
    1) **Skills to be developed**
        a) Develop the ability to tell time
            hour
            half hour
            quarter hour
            five-minute intervals
        b) Know twenty-four hours in a day
        c) Understand A.M. and P.M.
        d) Understand meaning of:
            today, tomorrow, yesterday - week, month, year
            early, late - night, day, noon
            afternoon, evening, morning- next

- e) Develop the relationships and meanings of calendar experiences
    - four seasons
    - twelve months in year
    - seven days in week
    - day of week
    - fifty-two weeks in year
    - century is 100 years
    - understanding meaning of A.D. and B.C.
- 2) Suggested activities
    - a) Study physical features of the clock, numbers, hands, minutes
    - b) Draw clock on paper plate--make movable hands with added cardboard
    - c) Use a real clock to show relationship of movement of hands to hours and minutes
    - d) Television and radio listings
    - e) Clock charts to show recess time, school time, etc.
    - f) Invitations giving time, date, etc.
    - g) Daily plans and time schedules
    - h) Make play watches
    - i) Make perpetual calendar showing days, date, months, weather, and seasonal picture
    - j) Birthday calendar for the students
    - k) Plan vacations
    - l) Study ways the people of long ago, Indians, etc., told time
    - m) Clock with Roman Numerals

c. Location
- 1) Skills to be developed
    - a) Above, below
    - b) On, off
    - c) Back, front
    - d) outside, inside
    - e) far, near
    - f) first, last
    - g) in front of, between, behind
    - h) beginning, middle, end
    - i) Up, down
    - j) left, right
- 2) Activities

    These concepts can be developed throughout the school day in work and play.

d. Quantities and Weights
- 1) Skills to be developed

    For understanding the meaning of:
    - a) less, more, many
    - b) few, fewer
    - c) pair, couple
    - d) some, none
    - e) empty, full
    - f) whole, part
    - g) less than, more than
    - h) jar full, glass full, cup full
    - i) heavy, heavier, heaviest
    - j) light, lighter, lightest
    - k) ounces, pounds, ton
    - l) dozen, half dozen

2) Activities
Through association with actual situations in the home and school:
  a) Keeping wright chart
  b) Comparison - using articles and objects
  c) Write an experience chart about things that are commonly sold by weight, such as meat, certain vegetables and fruits, staples, candy, coal, and charcoal

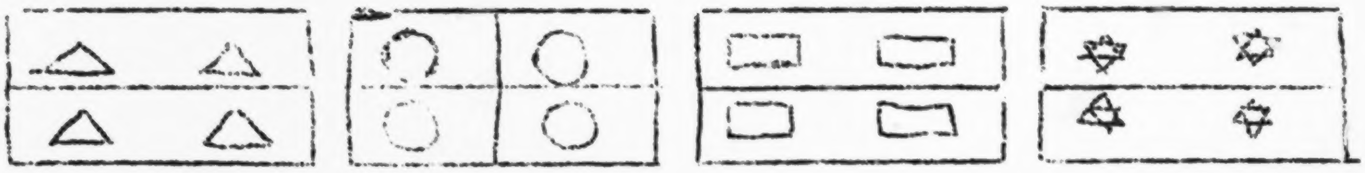
e. Measurement

  1) Skills to be developed
    a) size of 1 inch and ½ inch
    b) 12 inches equal 1 foot
    c) 3 feet equal 1 yard
    d) Size of pint
    e) 2 pints equal 1 quart
    f) 4 quarts equal 1 gallon
    g) Size of cup and ½ cup
    h) Size of teaspoon and tablespoon
    i) 16 ounces equal 1 pound
    j) Read and understand a simple thermometer
  2) Suggested Activities
    a) Sharing together--cooking, baking, gardening
    b) Measuring the room, curtains, etc.
    c) Make cookbook
    d) Play store
    e) Mix paint, art supplies
    f) Keep weight and height chart
    g) Measure play area, hop scotch, ball field
    h) Visit cafeteria and see measurements used
    i) Make charts to show size relationships
    j) Bulletin boards--cutting letters
    k) Hobbies--sewing, hammering, building
    l) Reading and following recipes

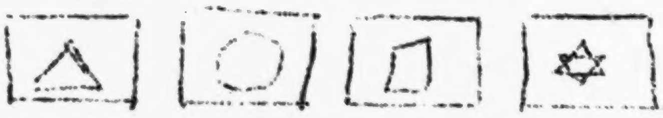
f. Speed
  1) Skills to be developed
  For understanding the meanings of:
    a) slow, slower, slowest
    b) fast, faster, fastest
  2) Activities
    a) Games and relay races
    b) Comparison - speed as it relates to social studies

g. Form
  1) Skills to be developed
  Ability to recognize and reproduce forms
    a) Circle
    b) Square
    c) Round
    d) Straight
    e) Triangle
    f) Rectangle
  2) Activities
    a) Teach children to recognize geometric shapes by participating in activities, such as playing matching game with Lotto picture cards.

Large cards



Small Cards



Make four of each, the same size as one section of the large cards.

The object of the game is to match the small cards to the corresponding block on the large card. Each player is provided with a large card. Another child, the "caller" has small cards. The "caller" holds up one of the samll cards for the player to recognize and take for his card. The first player to have his card covered is the winner and becomes the "caller" for the next game.

Have the children cut paper for construction projects into the above geometric shapes. Teach children how to fold paper so as to have a triangle, square, and star. Have the children color and cut duplicated geometric shapes to be used as game material. Make use of a co-ordination board puzzle (purchased commercially). Find objects in the room that denote the geometric shapes.

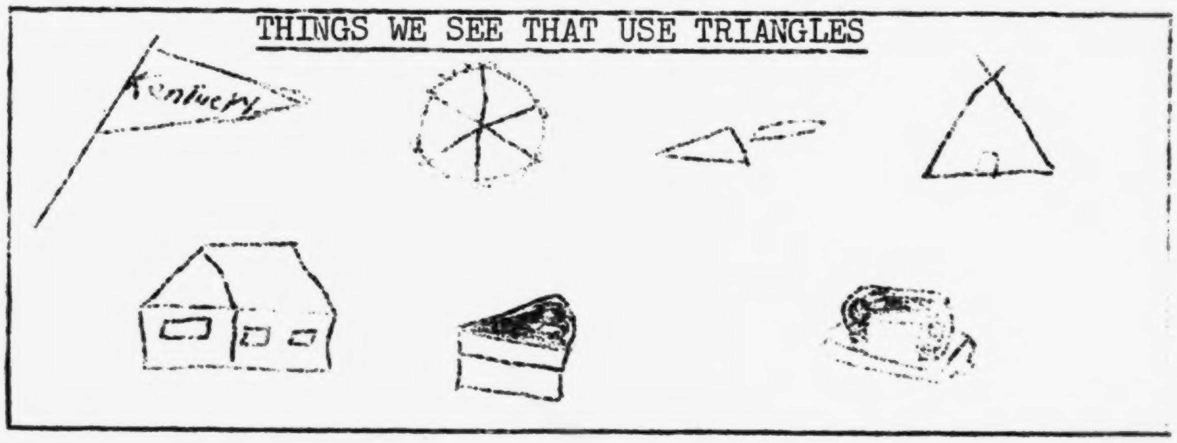
Make a bulletin board display of geometrical figures cut and labeled such as :

This is a square.

This is a circle.

This is a triangle.

b) Have pupils collect pictures of things that they see around them which use common geometric shapes. These pictures can be used for a bulletin board display. Display might be on the theme, "Things we see that use triangles." See illustration.


THINGS WE SEE THAT USE TRIANGLES
Kentucky

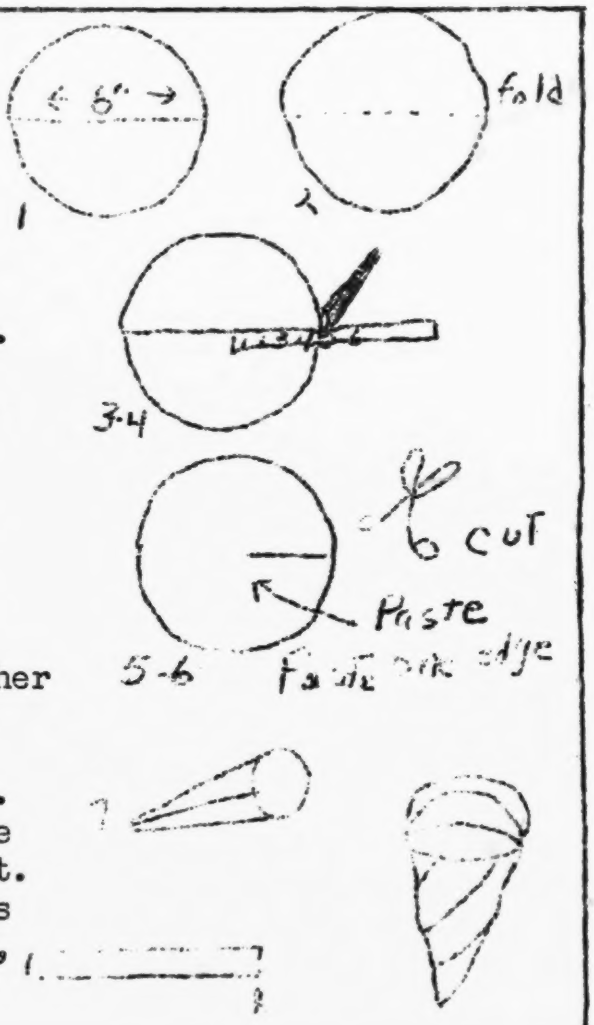
Have the pupils make craft projects which use geometric shapes.

Such things as baskets, hats, cones, Christmas tree ornaments,

room decorations, and composite pictures can be made. The following is an example of a project which utilizes a knowledge of geometric shapes and measuring:

Make a Basket

1. Cut a circle 6" in diameter from colored paper.
2. Fold circle in half.
3. Measure 3" from edge of circle on folded line to find the center.
4. Draw a line along the edge of the ruler.
5. Cut along the line that you drew.
6. Put paste on one edge of the cut.
7. Slide the pasted edge over the other edge of cut until you have a cone.
8. Cut a strip of paper for a handle. Paste or staple it on the opposite sides of the cone to make a basket. Baskets may be trimmed with strips of colored paper, seals, pictures, or crepe paper.



h. Money

Children begin using money at a very early age. They realize money is used to buy things without realizing the value of money and the relationship of one coin to another. Ideas and understanding the money value are developed in meaningful situations where actual money is used.

1) Terms and values to be established

a) One penny	1¢	$ .01
Nickel	5¢	$ .05
Dime	10¢	$ .10
Quarter	25¢	$ .25
Half Dollar	50¢	$ .50
Dollar	100Pennies	$1.00

   b) Dollars and cent signs--$, ¢
   c) Writing money symbols, using decimals

2) Suggested Activities
   a) Buying and selling in a store, making change
   b) Use of cash register
   c) Collecting show money
   d) Lunch money
   e) Selling seeds
   f) Saving stamp program

g) Post Office
h) Treasure reports
i) Grocery list--use of paper
j) Make a money chart showing place values based upon the tens system. Keep this chart displayed so that pupils will have a ready reference. See illustration.

MONEY CHART

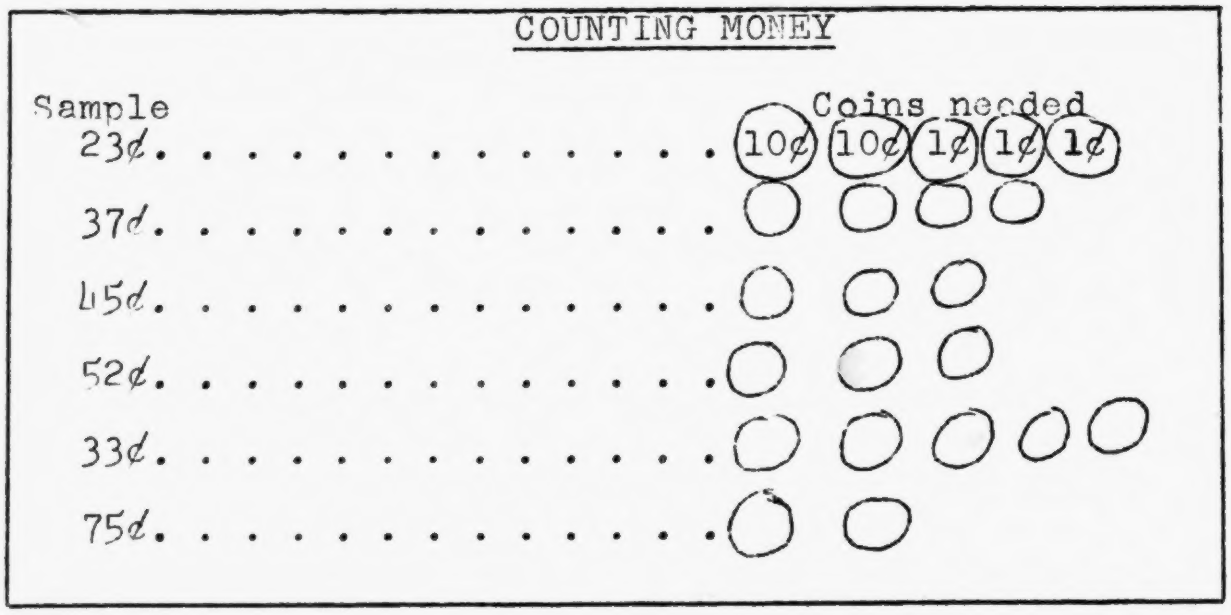
Dollars			Cents	
hundreds	tens	ones	dimes	pennies

k) Develop a work sheet that gives practice in writing cents in decimal form. See illustration.

WRITE ANOTHER WAY

10¢ ____________
23¢ ____________
12¢ ____________
5¢ ____________

l) Make duplicated work sheets which will give children practice in counting money. In one column on the sheet an amount of money will be stated. The second column will provide outlines of the fewest number of coins needed to make the specific amount stated. Pupils will be required to put the correct numbers on the coins. See illustration.



COUNTING MONEY

Sample — Coins needed
23¢. . . . . (10¢) (10¢) (1¢) (1¢) (1¢)
37¢. . . . .
45¢. . . . .
52¢. . . . .
33¢. . . . .
75¢. . . . .

As pupils become adept at this exercise, a more difficult variation may be introduced. This will consist of leaving the second column blank and requiring the pupil to draw in the fewest number of coins that would make the correct change.

Count money brought for milk, auditorium programs, school trips, supplies, and saving stamps. Such activities will help the pupil develop an understanding that numbers are needed by him in his daily living situations.

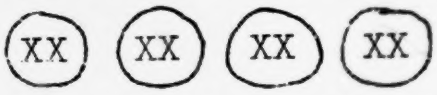
Play store to develop an understanding of the way materials are purchased. Use empty cartons, boxes, bottles, and containers to develop the measurement concepts that the child will need in making simple purchases. Make prices for items to be purchased.

Send a "thank-you" note or "get-well" card. Discuss the cost of mailing letters and postal cards.

2. Counting

   a. Skills to be developed (Depends upon the ability of the pupil)
      1) Enumeration by 1's (rote and rational counting)
      2) Grouping by 2's, 5's, 10's
      3) Ordinals (as the need arises)

   b. Suggested Activities
      1) Counting familiar objects in the room, students, books, windows, cafeteria count, and use of counting blocks, abacus, cards
      2) Use of counting games: lotto, tenpins, peg boards, pick up sticks
      3) Counting games: One, Two, Buckle My Shoe and Ten Little Indians
      4) Work sheets--fill in the missing number
      5) Making calendar
      6) Grouping articles in 2's, 5's, and 10's for easy manipulation, such as ice cream stocks, beads, pegs, paper
      7) Work sheet--draw circle around groups of pictures



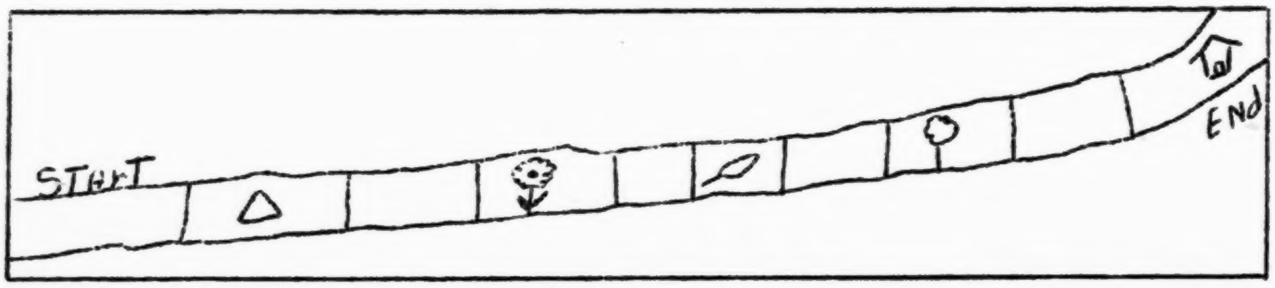
      8) Make a number fan--10 strips of paper 1" by 8", fasten with fastener, number pages, later use to discover addition fact
      9) Flannel board--assemble numbers in order
      10) Abacus coat hanger
      11) Number cards, paste stars or pictures on a card, write number and word on card, cut as a puzzle, students match
      12) Use of dominoes for grouping
      13) Make use of activities for teaching counting, such as:

Use finger plays, nursery rhymes, and games such as "Ten Little Indians" or "One, Two, Buckle My Shoe" to develop ability to rote count.

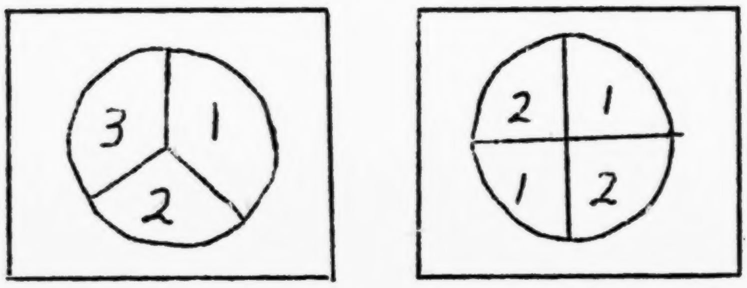
Use concrete objects such as blocks, books, crayons, pencils, sticks, toothpicks, beans, and children to develop the ability to count rationally.

Play games to give opportunities for rote or rational counting. Some games are "Bounce a Ball" -- count the number of times it bounces; "Bean Bag Toss" -- count how many bags went through the holes; "Drop Clothespins in aBottle" -- count how many clothespins went into the bottle; "Road Game" - - played by one to four children. A spinner is used to indicate how many spaces the marker is moved for each turn.

Illustration of "Road Game"



Types of Spinners



These can be made from cardboard by inserting a straight pin from the bottom and putting a paper clip on it for a spinner.

Use similar commercial games for learning rote counting.

PLACE NUMBERS IN SEQUENCE

1	2	3	4	5	6	7	8	9

FILL IN MISSING NUMBERS

1		3	4			7	8	

For a variation of this activity, make a large set and a small set of corresponding number cards. Have pupils match cards by placing corresponding small cards on large cards.

3. Reading, Writing and Recognizing Numbers

A child begins to associate the number word with the symbol through experience and class activities. Much practice and explanation must go into the understanding of the place arrangement of our number system. Place values, order, quantity, and size must be taught correctly and in orderly number sequence for good understanding.

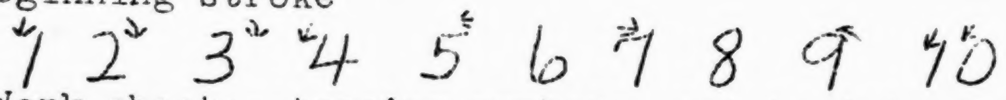
As a child learns to recognize the number symbol and number name, he develops the desire to write the number. Much emphasis must be put on number formation. As a child begins to form number figures, there is a great need for individual instruction, close supervision, and practice. Special attention should be given to the beginning stroke, size, place, and spacing of written numbers.

A teacher must be alert for wrong movement, reversals, substitutions, and left-to-right movement.

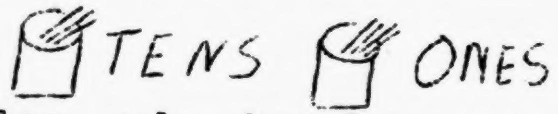
a. Skills to be developed
   1) Understanding quantity of numbers
   2) Place values of ones--tens--hundreds--thousands
   3) Recognizing and reading numbers
   4) Writing numbers

b. Suggested Activities

   1) Large muscle activity by tracing and writing numbers on board; teach one number symbol at a time--emphasis on beginning stroke

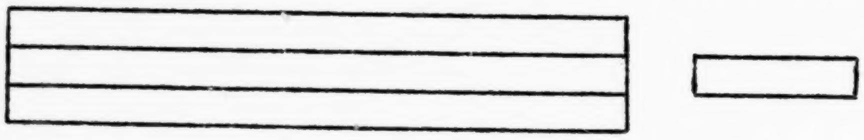


   2) Work sheets--tracing numbers, match picture and symbols
   3) Writing numbers by rote
   4) Accociation of numbers with objects--beads, seeds, pegs
   5) Some of "How Many." Teacher holds a card with a number of pictures, student writes the number
   6) Reading and making calendars
   7) House numbers
   8) Telephone numbers
   9) Thermometer and temperature chart
   10) Number pages in books
   11) Score chart for game
   12) Place value cans or jars for larger group activity



cans and ice cream sticks

   13) Place value box for more permanent use. Use ice cream
   14) Number Board--a board 24" by 36" for base. Mark 100 2" by 2¼" spaces. Put hook on each square. Make 100 cards with numbers from 1 to 100. Students place in proper box.



   15) License tags
   16) Speedometer
   17) Make and use a number chart for counting to 100. Place emphasis on the decades - 10, 20, and 30.

0	10	20	30	40	50	60	70	80	90	100
1	11	21	31	41	51	61	71	81	91	
2	12	22	32	42	52	62	72	82	92	
3	13	23	33	43	53	63	73	83	93	
4	14	24	34	44	54	64	74	84	94	
5	15	25	35	45	55	65	75	85	95	
6	16	26	36	46	56	66	76	86	96	
7	17	27	37	47	57	67	77	87	97	
8	18	28	38	48	58	68	78	88	98	
9	19	29	39	49	59	69	79	89	99	

Play games requiring number recognition, such as "Bingo," "Hopscotch," and "Bean Bag Board."

Develop a concept of ordinal numbers to tens by noting by ordinals children in a line, pages in a book, chairs in a row, days in the month, months in the year, and grades in the school.

Develop the ability to count by 2's, 5's and 10's by placing groups of concrete objects in groups of 2's, 5's or 10's before the pupils. Books, checkers, pennies, and pegs are objects which may be used. Much practice with concrete objects will need to precede writing or verbal rational counting.

Make a chart for display in the room which lists the number symbols for counting by 2's, 5's and 10's to 100. Individual charts should be made for each series in order that the pupil not become confused.

Make a duplicated work sheet which provides practice in counting. The sheet may direct the pupil to count and record such things as the number of green books in the room, the number of chairs in the auditorium, the number of tables in the cafeteria, and the number of pieces of chalk in the chalk box.
Make a work sheet to give practice in locating and positioning numbers from 1 to 100. See illustration.

Write the numbers that
come before and after

____ 67 ____
____ 45 ____
____ 34 ____
____ 53 ____
____ 23 ____
____ 98 ____
____ 16 ____
____ 73 ____

Provide materials which have lines of numbers with some of the number symbols missing. Have the children fill in the blank spaces with the missing number symbols. See illustration.

Fill in the missing number.

11 12 13___ 15 16___
26___ 28___ 29___31___
40 41___ 43___45___

Have the pupils make a number chart which has number symbols and corresponding number words. See illustration.

1	one	4	four
2	two	5	five
3	Three		

Make a set of flash cards with number words on one side of the cards and number symbols on the reverse sides. Cards can be used for small activity or for individual games.

Children may be motivated by allowing them to win cards which they read correctly. The child with the most cards wins the game.

18)See suggested activities for counting money to make small purchases from store and cafeteria.

See suggested activities for telling time by the half hour and quarter hour, and counting money to make small purchases from store and cafeteria.

Have the pupils use numbers in game situations, such as the number needed for each team, keeping score, counting while jumping rope, counting while doing exercises, counting while playing jacks, and finding homerooms by number.

Make a packet of duplicated material for each child, with his name, complete address, telephone number, birthdate and age, and the names of mother and father. Each youngster should be given the opportunity to practice copying this information several times weekly until he can do it independently. See illustration.

Practice Sheet

Name	John Jones	____________
Address	123 Lincoln Ave.	____________
	Lexington, Kentucky	____________
Telephone	266-6331	____________
Birthdate	May 18, 1955	____________
Age	12	____________
Mother's Name	Marjorie Jones	____________
Father's Name	William Jones	____________

4. Arithmetic Skills

Teaching the four fundamental arithmetic skills must be planned to include incidental learning and a systematic program of direct teaching.

Learning and understanding the basic number facts must be meaningful, based on daily needs and situations rather than mechanistic memory work.

a. Addition and Subtraction Mechanistic

Pupils must first learn the meaning of addition and subtraction and then (only after each can be identified) the basic facts may be presented as groups or number families. The use of concrete objects must be used to develop meaning. Move from the concrete to pictures, charts, and figures. Only after the child understands the process are the facts learned as a separate memory item.

b. Skills to be developed
   1) Understanding of addition
   2) Understanding of substraction
   3) Basic addition facts

4) Basic subtraction facts
5) Carrying to tens place
6) Borrowing from tens place
7) Progress to more difficult number experiences as need arises can be accomplished without excessive pressure on the child

c. Suggested Activities
1) Use of blocks, seeds, etc., to combine numbers
2) Writing and reading number combinations, horizontal and vertical

$$2 + 1 = 3 \qquad \begin{array}{r} 2 \\ +1 \\ \hline 3 \end{array}$$

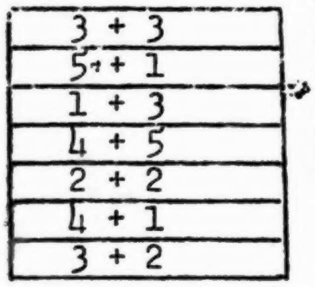
3) Use of visual aids--board, flash cards, counting frame, games, scores
4) Work sheets for practice
5) Buying and selling--play store, saving stamps
6) Games, such as fish pond

d. Multiply and Divide

Multiplication concepts are an outgrowth of addition facts, as two 2's, two 3's, etc.

Division concepts are related to multiplication facts and should be taught in pairs as they relate to the corresponding facts. Multiplication and division should be introduced with the use of concrete objects in meaningful ways to meet needs and abilities as applied in social situations. Automatic responses of facts come only after understanding and meaningful practice.

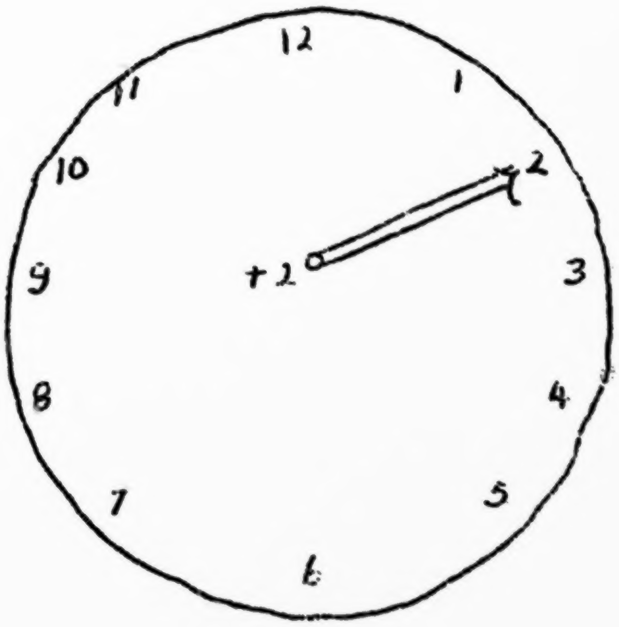
e. Skills to be developed
1) Use of visual aid--flash cards, grouping beads, pegs, etc.
2) Problem solving applied to social situations--cost of shows, parties, etc.
3) Use of electric number board
4) Flannel board
5) Peg board
6) Number wheel
7) Spinner wheels
8) Individual study pockets chart
Play "climb the ladder."


3 + 3
5 + 1
1 + 3
4 + 5
2 + 2
4 + 1
3 + 2

Draw a ladder on the blackboard. Object is to get to the top without errors. Combinations are on each rung. This may be used as individual seatwork or as a game at the blackboard. This ladder may also be used for subtraction.

f. Skills to be developed
1) Understanding the meaning of multiplication
2) Understanding the meaning of division
3) Read and write the symbols as: X ÷ $\overline{)\qquad\qquad}$
4) Basic multiplication facts
5) Basic division facts
6) Multiply and divide problems as they apply to their social needs
7) Progress to more difficult problems with understanding

Make an addition clock and use for group and individual activities.



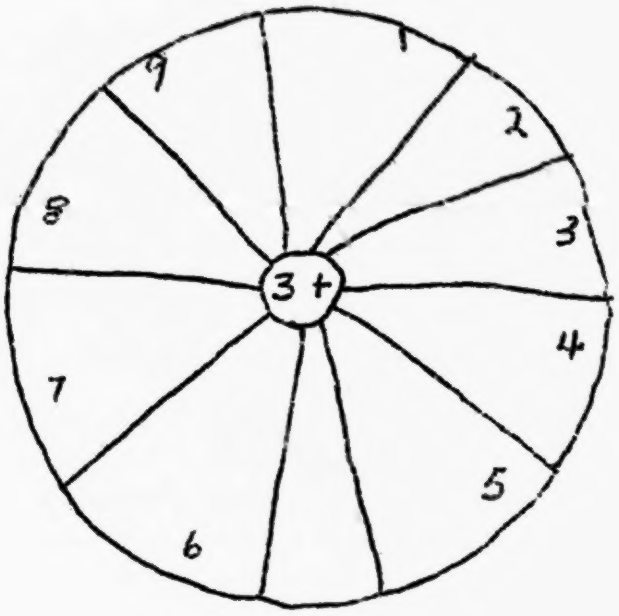
Spin the hand and add the number it points to, to the number in the middle.

Use also for subtraction.

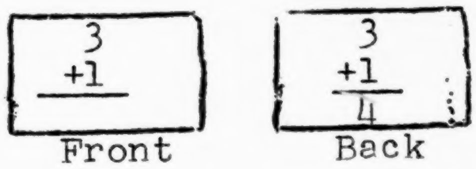
Play "bean bag throw" game.

Place a large cardboard circle on the floor. Throw a beanbag and add the number of the section it falls on to the number in the small circle. The center may be changed to any number.

Use also for subtraction.

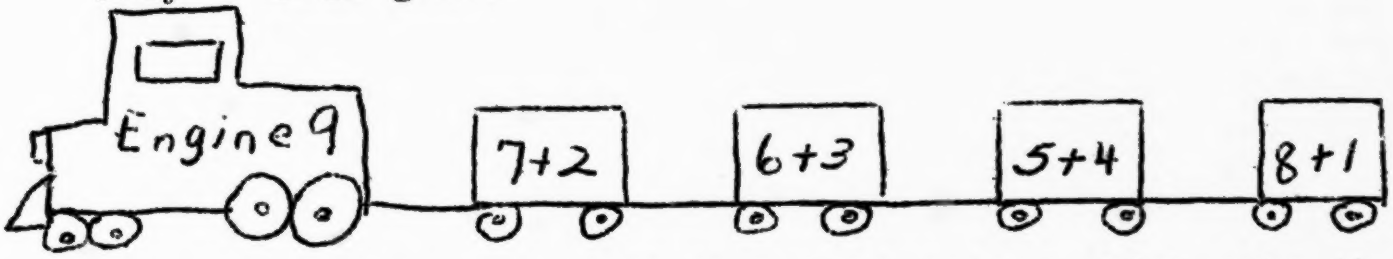


Use flash cards for practicing abstract facts.



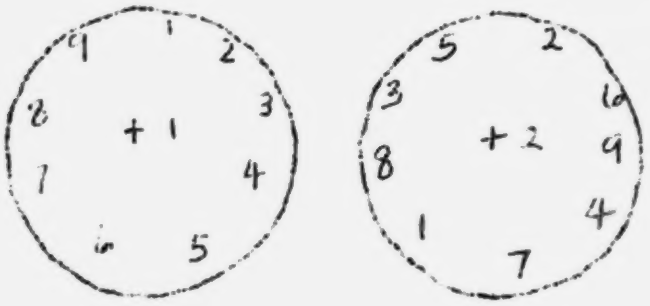
Front Back

Play a train game.



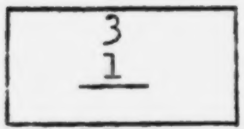
Give the engine a number. All the combinations which make that number are attached as cars to that engine. Have the children supply the cars by indicating the different combinations which make the engine number.

Make "number wheels" to use in individual and group games.



Number wheels or Bingo game may be used as a seatwork or blackboard activity.

Play "Bingo game" as a group activity. One child holds the small cards and shows or calls one card at a time. Player covers the numbers on his card which tells the answer to the combination as they are called. The first player to have a diagonal, vertical, or horizontal row covered is the winner.



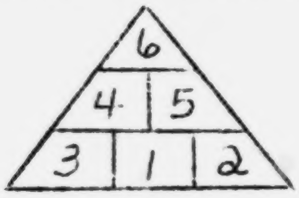
Caller Card

6	3	9
5	2	7
4	1	8

Player Cards

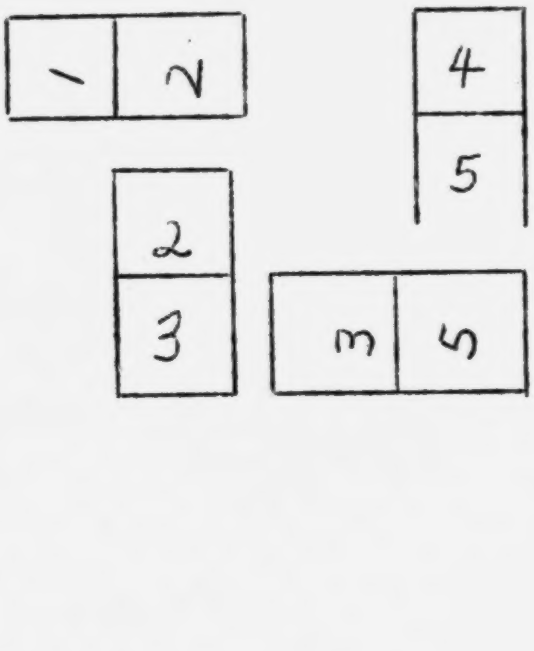
Play "Rummy" card game as a group number activity. The Rummy game consists of sets of cards with four duplications of each number. The object is to secure a set of four. Deal five cards to each child; the extra cards are placed on a pile. In turn, a child draws and discards until one has a set of cards.

Play "number board game" as a group activity. Throw an eraser or beanbag at a number board placed on the floor. The pupil hitting the highest numbers is the winner. Have more advanced pupils keep score on the board and add their scores to determine the winner. Number boards can be ordered on a requisition or teacher may draw a number board on the floor with chalk or on a piece of cardboard.



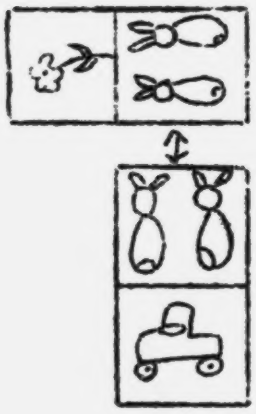
1	4	6
7	2	8
5	9	3

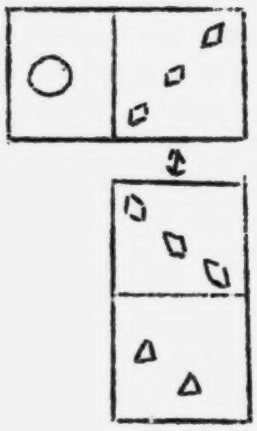
Play "number Dominoes" games as a small group number activity.



The number dominoes may be made from tagboard or Bristol board. Each player has a certain number of dominoes. The object of the game is to continue to match numbers until all dominoes have been used. The player using all dominoes first is the winner.

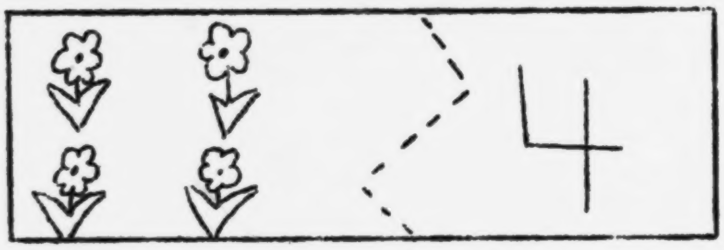
Play "picture Dominoes" games with immature pupils.

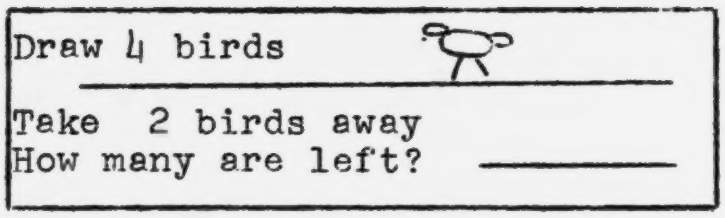




Play dominoes games using dominoes with pictures of semi-concrete forms.

Play "puzzle card" game. Make illustrated cards of cardboard or ropeboard. Put groups of objects on cards and corresponding numbers. Cut card between objects and corresponding number. They now become a puzzle. The child must fit the pieces together correctly. This game makes desirable seatwork. See illustration.





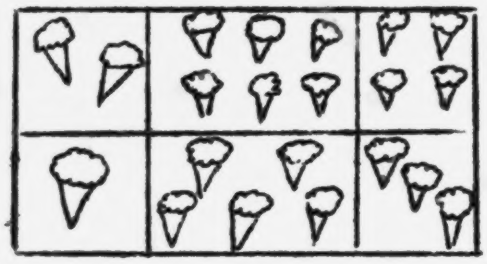
Draw 4 birds
______
Take 2 birds away
How many are left? ______

Make seatwork which will help pupils to learn beginning subtraction facts. Similar materials can be developed to introduce addition facts.

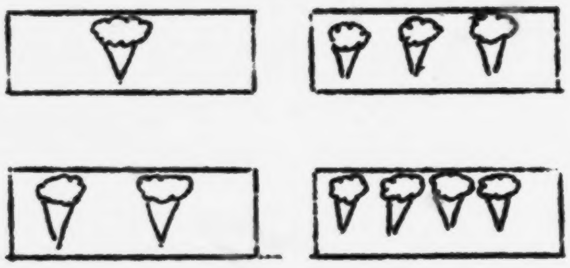
Have pupils recognize groupings to ten by using objects, progressing to pictures and other semi-concrete objects, then abstract symbols. Make cards illustrating the numbers one to ten. Gummed stickers or pictures cut from magazines may be used to make highly illustrated cards. Use flannelboard to illustrate groupings of objects. Regrouping of objects for beginning adding and subtracting can also be done by regrouping objects on the flannel board.

Play "picture Lotto" to develop pupil's ability to see groupings. The object of the game is to cover all of the large cards with matching small cards. The first player to have his card covered is the winner. Each player has a large card. One child has the small cards. He holds up a small card for the players to recognize and take. He continues this until one player is the winner.

Player Card



Caller Cards



Make use of the abacus, room equipment, and children for arranging objects in groups for adding and subtracting.

Do number stories by using toothpicks for developing and understanding of addition and subtraction facts.

2 plus 3 equal 5	5 minus 2 equal 3
3 plus 2 equal 5	5 minus 3 equal 2

Play games that require score keeping, such as throwing bean bags into a box and relay racing.

Make a scrapbook "Number Facts I Should Know." Each page of the book should contain the number facts which made a specific number. These number facts should be accompanied by illustrations drawn by the child. See illustration.

-5-

3 + 2 = 5	***	**	-	*****
2 + 3 = 5	**	***	-	*****
0 + 5 = 5		*****	-	*****
5 + 0 = 5	*****		-	*****

Teach carrying process by using concrete materials which can be manipulated easily. Pupils should be taught in terms of the 10's system. For example, 13 is a group of 10 plus three 1's. Place value of numbers should be taught simultaneously. Place value can be made more meaningful to the child if a chart is prepared and displayed for ready pupil reference. See Illustration.

Tens Chart

hundreds	tens	ones

Have children give answers to their problems in terms of place value. For Example: 10 added to 13 is 23, which is 2-10's and 3-1's.

Borrowing in subtraction should be taught by using concrete or semi-concrete materials which the pupils can see and manipulate. Pupils should be taught that borrowing is done in terms of tens. For example, in the problem 21 the teacher should help the pupil see that there are not -3 enough 1's in the "1" column to take 3 away. Therefore, a 10 must be borrowed from the 10's column and put into the 1's column. She should help the pupil see that there is now one 10 and one 1 which makes 11. 11 take away 3 leaves 8. The teacher should then explain that since we have borrowed one 10, there is only one 10 left in the 10's column. We are not taking anything away from the 10's column; so the one 10 is brought down to the answer. Pupils should be directed to make the changes in numbers as they complete the subtraction process. See illustration.

$$\begin{array}{r} 21 \\ \underline{-3} \\ 18 \end{array}$$

Consult teacher manuals accompanying arithmetic texts for additional ideas and activities which will help children understand the carrying and borrowing processes.

Make a chart which shows arithmetic signs and their meanings. Chart should be displayed for reference. See illustration.

+	Plus	Add
-	Minus	Take away, subtract
X	Multiply	Times
÷	Divide	goes into
=	Equals	is

The signs and their meanings should be discussed periodically. Each child should tell what the sign means and what it tells him to do.

Discuss the meaning of fractional concepts of one half, one third, and one fourth. These fractional concepts should be related to the division of a single object. Paper folding, apple cutting, dividing a candy bar, and dividing a circle are activities that will develop these concepts.

Apply these number processes to actual life situations that the pupil will face. This can best be done by having the teacher give problems orally. For example, the teacher may state: "I went to the store and purchased a loaf of bread for 25¢, a pound of butter for 76¢, and a jar of jelly for 31¢. How much money would I need to pay the grocery man?" Only one problem should be given at a time. One pupil should be selected to show on the blackboard how he arrived at the answer. Similar problems can be constructed from either real or hypothetical situations, such as purchasing clothing; buying tickets, book, supplies or food for a party; earning money; and time.

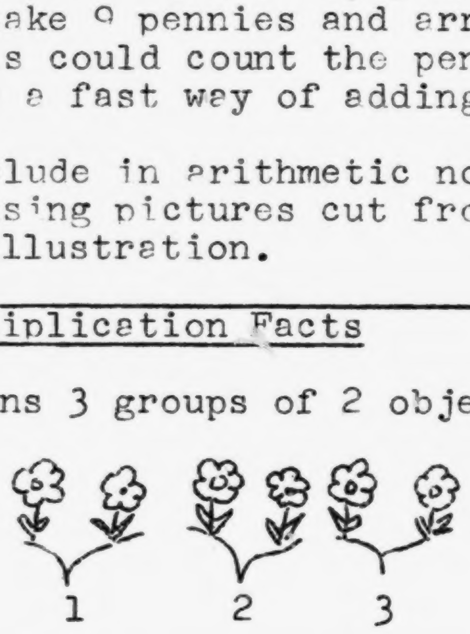
Develop an understanding of the concept of multiplication by explaining multiplication as a quick way to add. Teach the multiplication facts through 3's by showing that one number represents the number of objects in a group and the other number represents the number of groups. In the beginning stages this should be done with concrete objects, such as pennies, wooden cubes, poker chips, checkers, or pegs. Children should be given an opportunity to manipulate these objects into groups in order to attach meaning to the multiplication facts. For example, the multiplication fact, 3 X 3 =9, could be taught by having youngsters take 9 pennies and arrange them into three groups of three. Pupils could count the pennies to develop an understanding that this is a fast way of adding.

Make individual charts to include in arithmetic notebooks, illustrating multiplication facts by using pictures cut from magazines showing groups of objects. See illustration.

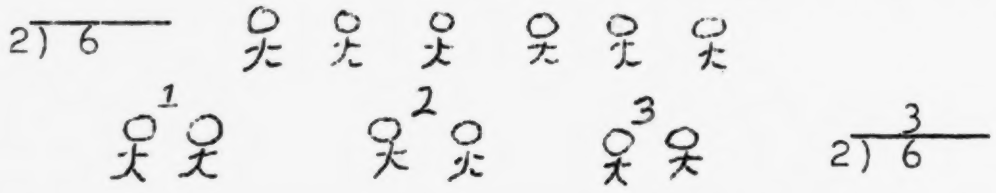
Multiplication Facts

3 x 2 means 3 groups of 2 objects

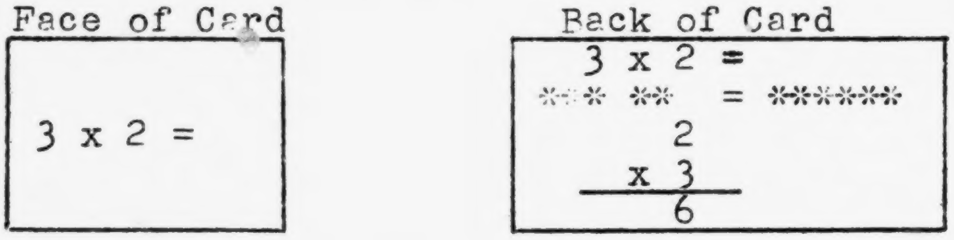
3 x 2 = 6



Use measurement idea to teach division facts. For example: How many 2¢ pencils can you buy for 8¢? The answer is found by taking 2 out of or away from 8 to find the number of groups. Children should be taught that division is a process which attempts to find the number of groups of a specific size that are contained in a number. Much practice with concrete objects should accompany the division facts. For example, the division fact, $3\overline{)\ 9}$ could be taught by having the pupil count out 9 poker chips. Have him divide the 9 chips into groups of three to find the answer to the problem. An advanced step to this activity would be to have the pupil draw pictures of the division problem that he is solving, as shown in the illustration.



Make a set of flash cards showing the multiplication facts on the face of the card without the answer. The back of the card should show pictorially that the multiplication fact of the front is a quick way to add. See illustration.



Teach pupils that all multiplication facts may be reversed. Give them many concrete experiences so that they can see that this is true.

Have pupils make their own individual catalogs. Colorful pictures may be cut from magazines for use in the catalog. Children should paste pictures of things they might like to buy, along with the price of the items in the catalog. Items should be inexpensively priced in amounts up to $1.00. Books, nail polish, toys, jacks, ice cream bars, candy bars, and cokes, are some of the kinds of things that might be included in the catalog. This activity will help children see the relationship between money and its purchasing power.

Give small arithmetic group exercises in counting and making change with real money. Give each child a problem which will require him to either count or make change. Hypothetical situations should set the scene for these problems. For example, the teacher says that John bought 2 pencils and a tablet. They cost 14¢. John gave the teacher the correct amount of money to pay for these purchases. What did John give the teacher? This problem can be extended by saying: "Suppose you had only a quarter. How much change should you get? Count the change to be sure that it is correct." Many varieties of this approach can be used to give children experience in counting money and making change.

5. Fractions

Children develop concepts of whole and fractions before school. Terms and values are often misunderstood in play, such as "the big half, etc." The written numerical term should be used with the spoken word to develop understanding.

a. Concepts to be developed depending on the ability of the child
    1) A whole
    2) The relationship of the fractional part ½, 1/3, ¼ to a whole
    3) The addition and subtraction of simple fractions
    4) More difficult concepts as need arises and pupils develop understanding

b. Suggested Activities
    1) Cutting paper into equal parts
    2) Use of visual aid, felt board
    3) Use of Hershey candy bar to see equal parts
    4) Use of interlocking circles to show equal parts

C. Health and Safety

Many materials applicable to the normal child can be used effectively in teaching health and safety to the intermediate educable mentally retarded child, for the goals are essentially the same for all children although levels of attainment may vary. Emphasis should be placed on functional outcomes. We must think in terms ofachild's total development and adjustment and plan the activities to help the child understand that health and safety measures are ways of thinking and living.
Situations which pupils meet in their daily lives in school, home and community are the ones a teacher makes use of in teaching health and safety.

Objectives of the Health and Safety Program

1. Establish desirable habits and principles of living to conserve and improve physical health.

2. Establish the desire for each pupil to live up to his finest potentialities by accepting responsibility, acquiring a sense of value, and being a happy, useful individual.

3. Learn and practice good habits of safe living to conserve and protect life and help others.

Skills to be Developed

1. Selects and eats new food.

2. Identifies foods in the four basic food groups.

3. Knows which foods are appropriate for breakfast, lunch, dinner, and snacks.
4. Becomes interested in the sources of basic foods, such as milk, fruits, vegetables, and meats.

5. Recognizes and selects a variety of restful activities.

6. Begins to understand when children should rest.

7. Begins to understand the importance of obtaining sufficient sleep.

8. Begins to understand that conditions such as ventilation and proper clothing help one sleep better.

9. Develops a positive attitude toward rest.

10. Performs some routines of body care and cleanliness.

    a. Practices regularity in washing face and hands.
    b. Understands when and how to bathe and shower.
    c. Knows when and how to brush teeth.
    d. Knows when and how to shampoo.
    e. Performs the tasks of trimming and cleaning fingernails and toenails properly and in privacy.

11. Knows proper procedure for blowing nose, coughing, and sneezing.

12. Understands and practices basic sanitary habits.

13. Begins to understand the relationship of rest to illness.

14. Knows what to do when ill or injured.

    a. Tells adults.
    b. Accepts medicine from parents or doctor.

15. Performs simple first aid.

    a. Washes cuts and scratches.
    b. Applies plastic bandages.

16. Knows not to exchange footwear, headwear, clothes, or toilet articles.
17. Begins to know the importance of keeping doctor and dentist appointments.
18. Knows where doctor and nurse's office is located in school.

19. Understands the importance of remembering certain rules about clothing,such as removing wet clothing and wearing appropriate clothing.
20. Understands that wearing glasses or a hearing aid may help him.

21. Engages in vigorous outdoor play.

22. Knows and plays a variety of games and exercises.

23. Voluntarily participates in exercising without adult urging.

24. Selects simple and appropriate games to play.

25. Enjoys participating in group games.

26. Practices sitting, walking, and standing correctly.

27. Chooses a safe place to play independently.

28. Understands and follows safety rules.
    a. Obeys safety rules for play areas and gymnasium.
    b. Uses roller skates, bicycles, gym apparatus, and other play equipment safety.
    c. Puts toys and play equipment in proper place after me.
    d. Avoids playing with dangerous objects, such as matches, firecrackers, guns, knives, unlabeled liquids, sharp pointed articles, or unfamiliar objects.

29. Does not talk with or accompany strangers.

30. Informs his parents where he is playing and returns home at designated time.

31. Knows how to get help from an adult in an emergency.

32. Practice safety at school.

    a. Observes entrance and exit rules.
    b. Avoids running, fighting, and pushing.
    c. Knows that policemen, firemen, and school guards help pupils live safely.
    d. Uses scissors and other sharp pointed tools carefully.
    e. Knows fire and air-raid signals and obeys them quietly.

33. Practice safety measures at home.

    a. Realizes that toys and other objects carelessly placed can cause serious accidents.
    b. Begins to understand some of the dangers in using natural gas, electrical appliances, and inflammable liquids.
    c. Knows that old newspapers, magazines, rubbish, and rags improperly stored can cause fires.
    d. Warns younger children of dangers related to old refrigerators, stairs, and electrical outlets.

34. Begins to understand why medicine should be taken only under the direction of adults.

35. Realizes that signs such as DANGER, POISON, KEEP OUT, and HANDS OFF have safety meanings and must be obeyed.

36. Practice safety when using sidewalks, streets, and highways.

    a. Respects the rights of others when using sidewalks.
    b. Obeys traffic lights.
    c. Faces oncoming traffic when walking on highway.
    d. Wears something white when walking at night.
    e. Understands the dangers of walking on or near railroad tracks.
    f. Begins to understand bicycle safety.

37. Recognizes and avoids common dangers when traveling.

    a. Avoids and reports fallen wires
    b. Avoids teasing animals.
    c. Recognizes some of the dangers in handling and experimenting with unfamiliar objects.
    d. Observes warning signs, such as DANGER, KEEP OFF, KEEP OUT, STOP, LOOK, LISTEN, DO NOT TOUCH, and UNSAFE.

Activities

1. Study of Basic Seven Foods

    a. Collect magazine pictures of foods and classify into seven groups.

b. Use pictures to develop good menus.
c. Visit school cafeteria to see care and preparation of food.

2. Study of time

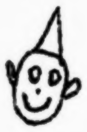
a. Time to go to bed in order to get 11 hours of sleep.
b. Time to get up in order to have sufficient time to prepare for school.
c. The best hours to spend out of doors.
d. Learn time when school begins and dismisses.
e. Paper plate clock for each child to use.
f. Check chart to encourage children to learn to tell time.

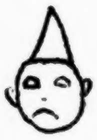
3. Height and weight chart can be kept throughout school year to show changes.

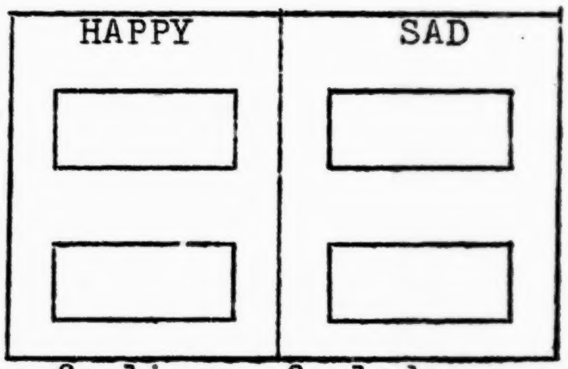
4. Have class discussion and list ways to stay happy.

5. A comparative chart of happy and sad experiences on oak tag, using drawings or magazine pictures.

6. Use flannelboard for clown face with removable expressions. Use happy and unhappy features.
Drama masks can also be used here.







7. Nursery Rhymes and poems that express feelings of gladness and sadness.
8. Practice greetings and use of voice to convey cheerfulness and friendliness, particularly on the telephone.

9. Stick puppets to illustrate family life.

10. Tour of building to familiarize students with location and use of facilities.

11. Explain cost of equipment and maintenance.

12. Encourage children to help the custodian by cleaning up their own classroom.

13. Have a general pick-up and clean-up at the end of each day.

14. Demonstrations of proper use and care of play equipment.

15. The use of rhythms and songs to create moods and express feelings.

16. Read "Have a Happy Measle," and do drawings of real and imaginary illnesses.

17. Read a story to show how germs are brought into the body.

18. Make charts showing symptoms of illness and how to care for them.

19. Acquaint students with proper clothing care.

20. Make tape name tags for galoshes and rubber coats.

21. Use colored clothespins to fasten galoshes together.

22. Make name tags for a hanger for each child.

23. Decorate a show box and keep filled with toilet tissue or paper handkerchiefs for children's use.

24. Discuss and select suitable music to be used at rest time.

25. Posters showing right and wrong way to behave in cafeteria.

26. Invite school nurse to talk with children.

27. Demonstration of how to read or work at home and school.

    a. Shadow from improper lighting.
    b. Good and bad posture--pipe cleaner people to show back bone and spinal slump.

28. Make a First Aid Box to be filled at home.

29. Make labels for medicine bottles. Use sandpaper to label poisons--this will be rough to the touch.

30. Firemen give First Aid Demonstration.

31. Each child learn the name and telephone number of his family doctor.

32. Collect newspaper articles on public health.

33. Keep records of vaccinations, inoculations, and visits to doctor and dentist.

34. Learn to recognize and spell words taken from unit, such as poison, Dr., Doctor, medicine, tissue, disease, cold, germs, ill, prevent nurse, cafeteria, sleep, rest, safety, safe, handkerchief, work, play, manners, clean, outdoors, adequate.

D. 1. Understanding and Accepting Oneself

    a. Develops interest and behavior consistent with age and sex.
        1) Begins to understand the role of both sexes in family and social life.
        2) Begins to express self through appropriate play and hobbies.

    b. Accepts and begins to understand physical self.
        1) Realizes that children vary in rate of growth.
        2) Knows that individuals differ in appearance.
        3) Begins to know that he will change physically.
        4) Begins to understand his physical handicaps.
        5) Assumes responsibility connected with his physical disability, such as wearing a hearing aid regularly.

c. Begins to understand his assets and mental limitations.
    1) Accepts the fact that he is in a slow learning class.
    2) Knows that he can do many things that others do in regular grades.

d. Begins to have some understanding of his feelings.
    1) Knows that it is important to be happy and pleasant.
    2) Realizes that talking to someone helps relieve unhappy feelings.
    3) Uses socially acceptable ways of expressing emotions.

e. Works toward realistic goals.
    1) Begins to move toward goals consistent with his assets and limitations.
    2) Works to achieve short-term goals, such as becoming room helper, baseball team member, safety cadet, or member of certain reading or arithmetic groups.
    3) Begins to develop respect for all work and workers.

f. Begins to demonstrate positive feelings of self-respect.
    1) Tries new tasks.
    2) Takes pride in assuming personal responsibilities in school and other places.
    3) Demonstrates a positive attitude in situations involving disappointment or failure.
    4) Takes pride in things that he can do well.

Activities

Provide opportunities for pupils to practice appropriate social graces. Such activities as entertaining parents or another class will enable the pupils to serve as hosts or hostesses.

Motivate and encourage interests in hobbies. Demonstrate and display the products of hobbies that pupils have pursued independently.

Discuss acceptable behavior for pre teen-agers. Use skits to illustrate desirable behavior. Explain how one's behavior causes others to accept or reject him.

Have class choose a rule-of-the-week relating to behavior. Have pupils evaluate how well the rule of the week was practiced.

Maintain a file of mounted pictures which may be used to stimulate discussions about how facial expressions affect others.

Talk about the inner feelings that all people have. Through this type of discussion, pupils can be helped to better understand themselves. Discuss how situations affect our inner feelings. Have pupils share personal experiences which affect their inner feelings.

Display a picture which portrays a person's feelings. Talk about what may have happened just before the picture was taken. Have the pupils discuss how the individual in the picture is reacting. Write a chart story based upon the discussion.

Use stories which reveal the feelings of the characters. Have the children tell how they would feel in the situation.

Discuss how people may feel about themselves. Point out strengths of certain pupils. The recognition of these strengths will help the child to develop a positive self-image. Counsel privately those pupils who have negative self-images.

Dramatize situations to help the pupils develop ways of reacting to success and failure. Talk about some of the positive ways of reacting to failure.

Discuss common handicaps. Point out how attitude, effort, and acceptance can reduce some problems associated with a handicap.

Make puppets with various facial expressions. Have pupils create stories which are associated with the facial expressions of the puppets.

2. Getting Along With Others

a. Begins to understand how to work and play in a group.
   1) Take turns.
   2) Shares attention and possessions with others.
   3) Volunteers and accepts help.
   4) Exercises self-control insome situations.
   5) Forms and joins clubs and groups.
   6) Contributes to family activities.

b. Begins to accept the rights of others to look, act, and think differently.
   1) Begins to accept different nationalities and races.
   2) Begins to be tolerant of the beliefs and ideas of others.
   3) Is tolerant of the handicaps and limitations of others.

c. Reacts appropriately to others.
   1) Respects parents and adults
   2) Begins to be concerned about others.
   3) Begins to assume responsibility for his acts.
   4) Avoids ridiculing others.
   5) Seeks friendship.

Activities

Plan activities to involve and give status to withdrawn pupils.

Have pupils talk about problems which affect their relationship with others. Develop a code for evaluating similar problems.

Have some classroom tasks reserved for pupil volunteers. Help pupils understand that volunteering entails a responsibility for satisfactorily performing a task.

Develop a chart in which good group manners are illustrated by pictures. Have the class practice and evaluate good group manners.

Talk about the effect of negative feelings on others. Have the pupils talk about and demonstrate more postive ways of reacting.

Talk about the harmful results of teasing and the implications of name calling. Talk about and list the traits that help one get along with others.

Organize a classroom club to acquaint pupils with responsibilities that are entailed in club membership. The concern of the club may be personal grooming, crafts or hobbies.

Have the pupils report on their club memberships and the advantages of belonging to clubs.

Talk about the meaning of responsibility. Use familiar situations which illustrate the necessity for carrying out responsibilities.

Talk about how disputes develop. Help pupils become alert to situations which may develop into disputes. Have the pupils suggest ways of avoiding these situations.

Talk about how to meet and treat new classmates and neighbors. Dramatize some things that pupils may do to be friendly. Talk about the importance of accepting others. Give examples which will help establish an understanding of tolerance. Encourage pupils to understand how manners, attitudes, and personality are related to acceptance.

3. Living By A Code of Values

   a. Begins to develop acceptable personal values.
      1) Takes pride in being honest and truthful.
      2) Respects the rights and property of others.
      3) Takes care of and returns borrowed items.
      4) Avoids fighting.
      5) Wants others to respect and like him.
      6) Develops a sense of right and wrong.

   b. Identifies and uses socially acceptable behavior.
      1) Uses simple expressions of courtesy.
      2) Shows consideration for others.
      3) Recognizes and admires some characteristics of famous persons and events associated with the American heritage.

   c. Begins to respect authority.
      1) Understands and respects simple rules and regulations.
      2) Begins to understand that authority exists for the protection and welfare of everyone.
      3) Realizes that one should co-operate with authorities.

Activities

Have the class discuss the purpose of group rules. Help the pupils recognize that rules and limitations are necessary for group living.

Have the class represented in the student council. Have representatives report about council meetings to encourage discussion of probable solutions to some school problems.

Conduct sessions in which pupils may identify, discuss, and evaluate problems affecting the group. Arrange the class in a circle to encourage group discussion. Use the blackboard to record problems, contributions, and solutions. The class and the teacher should discuss and evaluate suggested solutions.

Talk about borrowing and how it can lead to dispute. Point out the importance of being honest when borrowing or lending.

Talk about ways in which people differ. Select and talk about examples from American history to show how various races and nationalities have contributed to our heritage.

Introduce a person who has been vested with authority to the class. Have this person help the class understand each pupil's separate role and responsibility. The school patrol and the assistant principal are some of the authority figures who may be involved in this activity.

Display pictures of people in authority. Have pupils write a simple chart story to point out their responsibilities to these people.

Discuss some of the American traditions and customs which contribute to our code of values. Refer to this code when major holidays are celebrated or biographies of some Americans are studied.

Use current events to illustrate respect or disrespect for our code of values.

E. Music

Guide as written for primary educable mentally retarded children can be used for the intermediate classes.

F. Science

Some of the most rewarding experiences of life come through first-hand knowledge of the world in which we live. Pupils of all levels of ability, therefore, should be given the opportunity to observe, explore, discover, and experiment with the natural phenomena of their environment.

The science program for the retarded child should deal mainly with his immediate surroundings and his every day living. There is no limit as to what can be taught. The science units should come from the needs and interests of the students just as the social studies units do.

1. Areas of Instruction

We are not trying to make scientists of these children, but we do want to acquaint them to observe and discover and to make simple conclusions. He may never understand some of the wonders of our age, but he may appreciate the use of some of the things, and a simple explanation may set his mind at ease.

2. Techniques of Instruction

The student's curiosity can be aroused by presenting problems, providing books and pictures, and helping develop a science table. Some permanent equipment, such as magnifying glass, rocks and shells, magnets, fish, plants, and view-lex with slides, should be provided for the science table. The children should be encouraged to contribute things of interest to them.

They should have the opportunity to take apart, build, investigate, manipulate, and put together things. Much of the science can be integrated with other curriculum areas such as language, social studies, art, health and safety.

Even though science is usually taught through experience units, the teacher should have definite goals.

3. Aims

   a. To create an awareness and interest in our every day life.
   b. To create an understanding of the relationship between self and environment.
   c. To distinguish between fact and fiction.
   d. To provide experiences which will help children to understand and accept scientific concepts at their own levels of maturity.
   e. To provide opportunities for children to practice and use thinking steps in problem solving.
   f. To build an attitude of responsibility for the conservation of things within our environment.

Science is seasonal and should be taught when the children are curious about something and eager to find out about it. The environment of the child will determine the activities which will be most beneficial in his daily living.

4. Suggestions for Experience Units

   a. Seasonal Units
      1) Fall
         a) Weather changes of the season
         b) Leaf studies - shape and kind
         c) Seeds and how they travel
         d) Animals prepare for winter
         e) Changes in nature
         f) Autumn sports and family fun
      2) Winter
         a) Weather changes of the season
         b) Animals in winter
         c) What makes snow and how it helps us
         d) Shadows, light
         e) Foods in winter
         f) How our activities change in winter
      3) Spring
         a) Weather changes of the season
         b) What makes rain and how it helps us
         c) Gardening
         d) Bird Life
         e) Plant Life
         f) Trees
         g) Conservation - clothing, toys, school furniture, tools, and equipment, paper, food, water, time, energy, soil, animals and plants
         h) Baby animals
      4) Summer
         a) Weather changes of the season
         b) Sun and how it helps us
         c) Flower study

d) Foods in summer
e) Summer safety - teach and discuss rules

5. Other Units

a. Simple machines
b. Water animals
c. Making and caring for an aquarium
d. Making and caring for a terrarium
e. Observing weather from day to day
f. Planting and caring for fast growing plants
g. Foods
h. The air about us
i. Fire and its uses
j. How to care for pets
k. First aid
l. The sun and the stars

G. Arts and Crafts

Experience in arts and crafts, including all kinds of handiwork, plays a large part in the education of the mentally retarded child, since much of his satisfaction and learning comes through manual experiences.

Usually the mentally handicapped have somewhat poor physical development and motor skills. Their physical and motor development more nearly approaches the mental age norms, than the chronological age norms.

The mentally retarded child is interested in concrete factors of experience rather than verbal or abstract factors. His handwork activities should provide him with experiences that will help him develop habits, skills, and attitudes useful in his every day life in home and occupation.

The purposes of the manual arts or skills program are;

1. To develop muscular control and coordination

2. To release emotional tension through experiences with clay, paint, and other media

3. To gain knowledge of the proper use, and care of tools and materials

4. To develop good work habits with tools and materials

5. To provide a foundation for the basic hand skills used in industry. The development of hand skills in important since most of the children will earn their living through use of their hands.

6. To provide opportunity for personality development, i.e., the ability to work with others, helping others cheerfully and politely, to finish a job once begun.

7. To develop creative ability. Worthwhile accomplishment stimulates self-respect and confidence.

Handwork projects should be planned in order of difficulty. Special methods are also required to teach the mentally retarded child. The teacher must know how to "reach" the child or motivate an interest in doing things, must have infinite patience, must see that instruction is highly organized and sequential with no gaps that the child must fill in independently, must realize that the rate of progress will be slower than that of a normal child, and must use a greater variety of ways and situations to present the program.

The craft experiences should have educational value and the emphasis should be upon the effect of the experience on the child and not upon the product. However, crude the product may be, the values of the different kinds of crafts presented are measured in terms of individual child growth and development.

All the values that art and crafts education have for the so called normal child apply to the "slow" child. Art experiences are a means of self-expression and self-adjustment. Art is a vital force in daily living. It embraces seeing, feeling, thinking, expressing; hence, it strengthens sensory and social experience.

Art for the young child is the outgrowth of his desire to express himself. His interest in materials is only in the use of them to say the things he feels and thinks. His creativity must be allowed to release itself and he must be free to express himself in terms of his own thinking. Freedom of expression provides for happy adjustment at his various stages of growth.

Because art experiences are creative within the limits of the child's ability, the work is rewarding to him. It helps him to develop resources from within, which he needs more than the normal child. Mentally retarded children have feelings of isolation, thus they feel inferior and withdraw further unless thay have some means of compensation. Creative activity has the effect of releasing emotional tensions and opening the way for freer mental development. Not only does art make a real contribution to the personality development of the child, but observation of him in art situations furnishes the teacher with valuable means of diagnosing his adjustments and personal needs.

Much can be done for the mentally handicapped in art and crafts as therapy. Success along artistic lines often compensates for failure in academics. The ability to mold in clay, to weave, or draw a credReitable picture may take the place of a lack of ability to read or work arithmetic.

It has been quoted that creativity is usually associated with intelligence, yet the mentally retarded usually have some degree of creativity which can be fostered through the enrichment of experience and the presentation of many and varied materials with which they can work.

Should the teaching methods for these slower ones be different from the normal ones? Charles D. Gaitskill says: "It appears that the approved teaching methods in art used with normal children are practical and effective when applied to slow learners. The usual pedagogical procedures found for normal children, including motivation, guidance, classroom arrange ents, display and appraisal of the effectiveness of the program in progress vary in no marked respect from those which may be recommended for children of retarded mental development." [1] As you plan your art lessons, go very slowly. Teach one process at a time.

[1] Gaitskill, Charles D., "Art Education for Slow Learners," School Arts, February, 1954, p.5

Build your art lessons in developmental sequence. Be able to see growth.

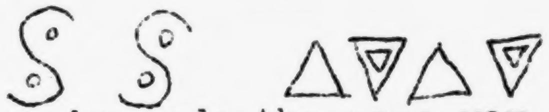
Suggested Activities

1. Primary

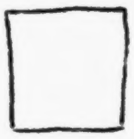
   a. Scribble drawings - using newsprint, newspaper or construction paper
   Procedure: Scribble with crayon or light pencil all over the paper. Look over the scribble and find some that resembles a familiar thing (dog, cat, house, etc.). Fill in with heavy color crayon.

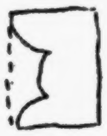
   b. Designs - using newsprint or construction paper
   Procedure: Fold paper into squares. Then fill every other square with a design. Color this and it makes attractive wrapping paper or ornamental book covers.

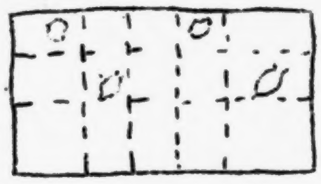
   Examples:



   Cut paper design can be made the same way. Give each child a square piece of thin colored paper. Let him fold it into half and cut a design. Use this as a pattern to make other designs. Paste designs on every other square.

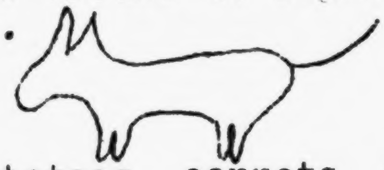






   c. String figure - using large size newsprint, crayons, and string.
   Procedure: Loop string into an interesting shape, figure, or design on the paper. Draw around it lightly with crayons. Then color and fill in details.

   Example:

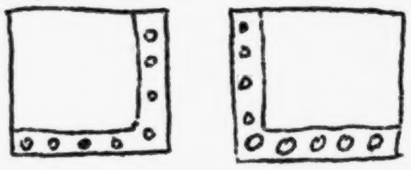


   d. Block printing - using potatoes, carrots, wire egg beater, screen, etc., newsprint and construction paper, jar lids large enough in which to dip slice of potato or carrot.

   Procedure: Slice end off potato or carrot; with paring knife or scissors, cut a design in potato or carrot. Dip in paint and transfer to paper.

   Try on materials to make border prints. Using unbleached muslin to make curtains, table mats, chair covers, etc.

   Example:

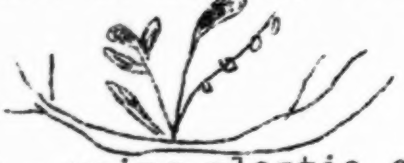


   e. Brush strokes - using construction paper, tempera paint, large and small brushes.

   Procedures: First lightly dip the brush into paint and try different kinds of strokes. This may take one art period.

When children have learned to use brush and paint, make a design or picture with strokes. Be sure children do not "paint" or re-touch. All of this is done by the stroke of the brush.

Example:



f. Modeling in clay - using plastic clay and later regular clay.
Procedure: There are too different approaches to modeling with clay.

1) Analytic Method - pulling out from a ball of clay.
2) Synthetic Method - putting single things together to make a whole.

Let the child choose his own method - both reveal different kinds of thinking.

The child who has not worked with clay usually will make balls, then snakes, and finally an object. Suggestions are:

1) Bowl - a good bowl can be made by making a ball from a lump of clay. Push in the center of the ball with fist, gradually rolling sides down and under to keep it from becoming too thin. When bowl is well hollowed, mold and shape with fingers.
2) Animal - roll two coils of clay side by side to make the base for an animal or man. Bind the two coils in the middle, separate, and you have the four legs for an animal; or pull out from a large ball the head and extremities. Mold and shape with fingers.

Examples:

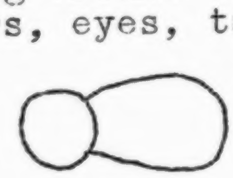
g. Paper bag masks - using medium size paper bags, paste, crayons, tempera paint, construction paper.

Procedure: Put paper bag over child's face and mark where eyes, nose, and mouth go with crayon. Then cut holes for eyes and decorate mask by coloring, adding paper cut out noses, ears, mouths, eye lashes, hair, etc.

h. Paper Maché - using newspapers, paper bags, wallpaper paste, string, tempera paint, gummed craft paper 1 inch wide, felt, yarn, and scissors.

1) Paper bag figure (animal or person)
Procedure: To make an animal for primary children, use a small paper bag, stuff it with newspaper; crumple the paper and tie near the end. Tie another string around bag near the end to make head. Add cut paper bill, ears, eyes, tail, wings, etc. Paint with tempera paint.

Example:



2) Animal or person
Procedure: Cover the table with layers of newspaper. Four additional more to use for maché. Fold over four layers of newspaper a couple of times and then roll almost to the end. Then place four more layers in the end of the roll and roll that. This is the body. Wet gummed craft paper in paint cup and roll around newspaper

on diagonal. Roll four more for legs. Bend the leg roll in half, put over the body roll, tie securely under the body. Do same for front legs. Fold newspaper and pad body or fill in with wads of paper and gummed craft. Shape a circle of cardboard for head and put in wads of paper and build up head. A cardboard box (rolled oats) can be used as body. After animal is shaped, cover with gummed craft paper. Fringe 2 inch strips of newspaper and apply to animal for hair. (Crepe paper can also be used) Paint or spray paint. (Spray thin about ½ water and ½ paint.) Apply to ears, eyes, tail, etc.

i. Finger painting - Finer painting is an activity which most children enjoy. It provides opportunity for using the large muscles of the arm and fingers.

Homemade paints are easy to make and are less expensive than commercial ones. Some recipes are: (1) Mix one-half box of laundry starch (1½ cups) with just enough cold water to make a paste. Then add one quart of boiling water. Cook until clear or glossy. Stir constantly to keep lumps from forming. Cool and add one and one-half tablespoons of powered tempera paint of the desired color. The paint should be thick. Darker colors are made by adding more paint. A few drops of cloves or winter green will keep it from souring. Keep in a cool place.
(2) Gloss-tex - a prepared plastic starch can be bought at the grocery store. White butcher paper any size may be used. It is not necessary to wet the paper. Put one or two tablespoons of the mixture on the paper and add a small amount of the tempera powder. It will mix as it is worked.

If commercial paper and paints are used, follow this procedure: Write name on the dull side of paper. (Glossed side is used for painting). Roll paper with slick side in, immerse in water, push down the loose end first, unroll slowly to wet the surface. Place the wet paper on the table with the slick side up. Smooth out wrinkles and lift the corners to let any air bubbles escape. Put one or two teaspoons of finger paint in center of paper. Use the whole hand and spread paint all over paper. Using finger, palm of the hand, elbow, etc., in circular, horizontal, or perpendicular motions, make a design or picture. Start at left of paper and work to right side. When picture is complete, lift the paper by the two upper corners, place on newspapers to dry. Press with iron when painting is dry. Mount the finished painting on white or colored construction paper and display. CAUTION - it is desirable to have only a few children finger painting at one time as much individual supervision is needed, especially for primary children.

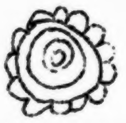
j. Chalk drawing - using free drawing on large sheets of newsprint; using colored chalk on colored construction paper, (white chalk on dark blue or black paper makes attractive snow pictures or colored chalk on wet construction paper.)

Spray chalk drawings with fixative. Directions as follows: Use four parts alcohol and one part clear shellac in flit gun. Place a pin in the spray jet to prevent spots on the drawings. Spray should be just a fog or mist. Sugar water or skimmed milk may be used, but not as successfully.

k. Murals - using of the various media (chalk, crayons, cut paper, tempera paint, cloth, newspaper, or a combination of these.) Mural making is especially helpful in personality development (Cooperation, sharing, etc.). Read "The Mural" in "Art Helps" furnished by the Fayette County Schools for suggestions and helps about murals.

l. For more mature children a variety of experiences in arts and crafts can be given. Some other activities are : Weaving

Examples:



Woven Mat

Materials: art fibre cord, or reed stakes (8-18') (1-9½"), art fibre cord-natural (10 yds.) border in color (6 yds.), or reed dampened (15 yds.), raffia dampened, Lepage's glue, and lacquer.

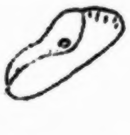
Tools: yardstick, rule, milliner's pliers, wire cutting pliers, scissors, scratch awl.

Procedure: Measure and cut stakes. Cross four stakes over four stakes; they should be kept flat. Add the short stake next to an end stake. With raffia bind across center of stakes on the diagonal two times, then cross over diagonally the other way two times. Then cross over four stakes, and under four stakes two times then go around one stake and go over the other set of stakes. Repeat. Pair stakes and weave over two and under two for eight rows.

When adding raffia, leave a little end which becomes a part of a stake and weave over it. Separate stakes so that spaces are almost even and weave under one - over one until base equals three inches. Weave - pull up and toward center, down and toward the center. Thread final end of raffia on 18 tapestry needle and slip through woven raffia. Weave a five inch mat. To end a cord run it down the side of one stake and start the other cord on the other end of the stake. To make top border or loop border, bend one stake in front of next stake and insert to left of the second stake, sometimes called loop, scallop or open border. Size and lacquer.

m. Leathercraft - using steer hide, make key rings, comb cases, coin purses, loop belts, billfolds, and pencil cases. If tooling is done, keep the pattern simple. Simple lacing stitches also can be mastered.

Example:



Key Ring

n. Simple sewing - using materials and needles that are easily handled. Those who can be taught to do simple stitches and to understand when to use them, will be helped to meet some of every day living needs such as mending, making simple household articles, aprons, etc.

Examples: Make a picture with the running or basting stitch on burlap or cotton using sansilk or other heavy thread. Making a button picture using buttons and strong thread. Make a cosmetic case or comb case, using art canvas, sansilk, and tapestry needle, using the cross stitch and button hole stitch. Make bean bag and simple toys. Make an apron, simple curtains, table mats. Embroider a towel or mat. Teach use of thimble, how to thread needle, make a knot, etc.

o. Lettering - using construction paper and scissors (sharp pointed) cut letters for posters, bulletin boards, etc.

p. Braiding - using lustre lace (flat or round) gimlet - make lanyards, bracelets, and head bands.

q. Construction - using large blocks or boxes make trains, stores, postoffice, fire engine, etc. Others may do simple wood working so that they may learn to use a few basic tools safely and correctly. Some suggestions are jig-saw puzzles, kites, book ends, door stops, corner shelves, bird feeders, etc.